REPORT RESUMES

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AN EVALUATION OF COMMUNICATION MEDIA USED IN THE ADULT LIBERAL STUDIES PROGRAM.
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AS PART OF AN ADULT LIBERAL STUDIES PROGRAM (BASIC ISSUES OF MAN), AN EVALUATION WAS MADE TO DETERMINE THE EFFECTIVENESS OF COMBINATIONS OF TELEVISION, FILMS, WRITTEN MATERIALS, AND GROUP DISCUSSION IN EDUCATIONAL SITUATIONS INVOLVING EXPOSURE TO THE MEDIA ALONE OR IN GROUPS, THE AIM OF THE PROGRAM BEING TO BRING ABOUT ATTITUDINAL CHANGES. THE STUDY OF THE EXPERIMENTAL GROUPS WAS CONDUCTED IN ACTUAL FIELD CONDITIONS IN COMMUNITIES THROUGHOUT GEORGIA. CONTROL GROUPS, WHO HAD COMPLETE ABSENCE OF EXPOSURE TO THE INFORMATION RESOURCES, WERE RECRUITED FROM CONFERENCE MEMBERS AT THE GEORGIA CENTER FOR CONTINUING EDUCATION. AGE, RESIDENCE, SEX, MARITAL STATUS, EDUCATION, OCCUPATION, AND INCOME WERE CONTROL VARIABLES. THERE WAS LITTLE EVIDENCE TO SUPPORT THE EXISTENCE OF RELATIONSHIP BETWEEN EXPOSURE TO CONTENT MATERIALS OF THE PROGRAM AND ATTITUDINAL CHANGE. FOR TWO OF THE FIVE ATTITUDINAL ORIENTATIONS, THERE WAS SOME EVIDENCE TO SUGGEST RELATIONSHIP BETWEEN THE TYPE OF TREATMENT AND ATTITUDINAL CHANGE. WHEN CONTROL VARIABLES WERE INTRODUCED, THE RELATIONSHIP WAS CLARIFIED ONLY SLIGHTLY AND SIGNIFICANT CHANGES THAT WOULD SUGGEST A RELATIONSHIP WERE NOT EVIDENCED. POSSIBLE IMPLICATIONS FOR THEORY AND METHODOLOGY IN RESEARCH AND FOR PROGRAM PLANNING WERE NOTED. (THE DOCUMENT INCLUDES TABLES, APPENDIXES, AND REFERENCES.) (LY)

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An Evaluation of Communication Media Used in the Adult Liberal Studies Program

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Research Director

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Program Administrator

AC001837

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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CONTENTS

Foreword. i

PART I DESCRIPTION OF THE PROGRAM 1
  Introduction 1
  Purpose. 1

  CONTENT MATERIALS 2
    The Reading Materials 2
    The Viewing Materials 5
    Discussion. 14

  Summary and Objectives 14

PART II THE THEORETICAL ORIENTATION 16

  OBJECTIVES 16

  BACKGROUND AND IMPORTANCE OF THE PROBLEM 16

  RELATED LITERATURE 19

  HYPOTHESES 20

  VARIABLES 20

PART III METHOD AND SAMPLE. 23
  Introduction 23

  RESEARCH DESIGN. 23

  LOCALE 26

  SAMPLING PROCEDURES. 26

  THE INSTRUMENT 32

  INDEXES AND METHOD OF INDEX CONSTRUCTION 33
    Educational Preference Index 35
    Authoritarianism-Dogmatism Index 38
    Fundamentalism-Liberalism Index 41
    Cultural Relativity Index 46
    Basic Group Orientation Index 48

  SAMPLE CHARACTERISTICS 50

PART IV TYPE OF TREATMENT AND EFFECTS OF COMMUNICATION MEDIA . . 58

PART V INTRODUCTION OF VARIABLES 70

  CONTROL VARIABLES 70
    Analysis of Control Variables 72

PART VI SUMMARY AND CONCLUSIONS AND IMPLICATIONS FOR FUTURE RESEARCH . 74
  Educational Preference. 75
  Authoritarianism-Dogmatism. 75
  Fundamentalism-Liberalism 76
  Cultural Relativity 76
  Basic Group Orientation 76

BIBLIOGRAPHY 81

APPENDIX A. 85

APPENDIX B. 95

FOREWORD

THE STUDY reported herein was designed and implemented as a part of a program in adult liberal studies developed and presented under the title Basic Issues of Man. As originally conceived, the planned learning activity of participants was to center around reading, viewing, and discussing. The reading material was to consist primarily of six brief volumes written expressly for the program by members of the University of Georgia faculty; the viewing was to consist of twelve especially-created television programs, based on the reading materials, which were also made available on 16 mm film; while the discussions were to be directed toward the issues presented in the reading and viewing materials and their relevance to current problems and everyday life activities.

The reading materials, the film series, related materials, and the experimental program were made possible through the financial assistance of The Fund for Adult Education, while the related study reported herein was made possible by a grant from the U. S. Department of Health, Education, and Welfare, U. S. Office of Education, Title VII of the National Defense Education Act.

The specific aspect of the total program investigated in this study was the contribution to selected learning objectives made by various combinations of reading, viewing, and discussion activity of participants.

The decisions as to the classification of learning objectives to be measured and their more specific identification were among the most difficult encountered in the study design. The nature of the program presented a broad range of potential outcomes. The designers were thus tempted to develop a fishnet approach, measuring cursorily a wide range of possibilities to discover what, if any, dimensions of potential change occurred. There was the further temptation to concentrate on the "safer" dimensions which have more customarily been used in related adult education programs, namely, information and knowledge acquisition and/or participant reaction through rating various aspects of the program.

The decision, however, was to concentrate on the dimension of attitudinal change. This class of educational objective has been among the most difficult to develop effective educational programs for and simultaneously among the most difficult to develop adequate instruments of measurement for.

A recognized hazard was the fact that the program was directed toward mature adults with above average levels of educational attainments, a target group generally considered to be less susceptible to attitudinal changes--particularly as compared with children and youth. Furthermore it was recognized that significant changes in attitudes achieved by planned educational means generally occur in small increments over extended periods of time. Dramatic changes of basic attitudes over comparatively brief periods of time seldom occur except in crisis life experiences or highly volatile emotional experiences closely akin to religious conversion. It was therefore recognized that the program might be neither long enough nor emotionally charged enough to produce significant measurable change in the relatively basic attitudes measured.

This choice was made, despite the hazards, for a number of reasons. First of all, there was considered to be little need to add to the literature a compilation of participant subjective judgment along such lines as interest, satisfaction, and effectiveness. This approach to the evaluation of adult liberal studies programs has been used frequently and its repetition would add little of value.

An even more crucial influence was recognition of the claims made by some advocates of the educational use of both liberal studies and visual media as to their potential effectiveness in bringing about basic attitudinal change. Most such claims appear to be based more on assumptions, faith, and hope than on systematic evidence. It seemed, therefore, that both the issues approach to liberal studies and the extensive use of visual media provided an excellent opportunity for an exploratory study.

The most decisive influence, however, was the coupling of the stated program objectives to apparent concomitant attitudinal dimensions. This consideration is presented in some detail in the body of the study.

Two important factors conditioning the study should be noted. The controlling reason for developing the Basic Issues of Man program was not to conduct the research herein reported, but rather to develop an adult liberal studies program and make it available to the public through the regular channels of the Continuing Education arm of the University of Georgia. In the over-all process, therefore, program development and implementation requirements were given priority over research requirements. Thus, when unavoidable conflicts occurred, research implementation had to accommodate program implementation conditions rather than program implementation accommodating research design conditions. Some of the limitations of this situation are noted in the body of the study.

The second important conditioning factor for the study was the placing of critical decision-making responsibility for research design, implementation, data analysis, and reporting in the hands of the research director rather than the program designers and administrators. This was done to avoid the natural biases of a program administrator and also because the scope of program development and the related research required division of labor.

As a consequence, the research is limited by the fact that it could not be conducted under as "laboratory-like" conditions as were desirable; but, on the other hand, it is more realistic in the sense that it was conducted under actual field conditions of university adult programming. Also, the study was relatively more "objective" since program administrators did not attempt to protect themselves by "building-into" the design factors which were likely to make the program "look good."

Chief credit for the merits of this study are due to Dr. Hugh Max Miller, Department of Sociology and Anthropology, who assumed responsibility as Research Director of the project just prior to the implementation phase. Development of the design and instruments was largely the work of Leslie J. Silverman, Department of Sociology and Anthropology, who served as Research Director until just prior to the implementation phase of the study at which time he accepted another position not connected with the University of Georgia.

Dr. Miller was thus placed in the unenviable position of conducting a research project designed by others under conditions where he had scant opportunity to develop modifications, either before or during the implementation phases.

The administrators of the Basic Issues of Man program are grateful to Dr. Miller for the excellent job he has done under extremely difficult conditions. Appreciation is also expressed to Dr. Frederick L. Bates, Professor and Head of the Department of Sociology and Anthropology, for his cooperation and kindness in making arrangements for Dr. Miller to conduct this study, and even more, for his wise counsel and support in all aspects of the project.

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PART I DESCRIPTION OF THE PROGRAM

Introduction

THIS is a report on the research evaluating an adult liberal studies program. The purpose of the evaluation is to determine the effectiveness of the combined use of various communication media and to increase understanding of liberal studies among adult audiences. The media being tested are combinations of television, films, written materials, and group discussions. The educational situations to be tested involve exposure to these media alone and in groups.

The research is directed toward determining the special contribution to selected aspects of learning which these media combinations make and toward critically analyzing the contribution to such learning that these media make in order to determine their most suitable and efficient use.

This type of study is unique insofar as it is primarily evaluative in nature, is being conducted in the adult field, and utilizes a particular combination of media used in the adult liberal studies program, Basic Issues of Man.

The development of the educational materials and the research design began in 1959, and the data gathering phase of the project was completed in 1965. The principal investigators are Thomas W. Mahler of the Georgia Center for Continuing Education and Hugh Max Miller of the Department of Sociology and Anthropology. The staffs of both departments have worked jointly in the conceptualization and data gathering phases of the project.

Purpose

Adult Education has gained wide acceptance in the past and is increasingly becoming more instrumental in shaping contemporary attitudes and patterns of action. Adults have many time-consuming responsibilities which raise practical questions of allocation of personal time to pursue the worthwhile purposes of continuing adult education. It is with this fact in mind that this research was undertaken; i.e., that some programs and methods of adult education have variable utility and function for variable types of groups and individuals. Knowledge about these phenomena can be useful to adult programmers in shaping their planning and to adults in choosing programs of education in which to participate.

The purpose of the program was to "introduce the liberal studies and the basic issues with which they deal." With financial assistance from the Fund for Adult Education and through the use of personnel and facilities at the University of Georgia, particularly the College of Arts and Sciences and the Georgia Center for Continuing Education, materials were developed which could be utilized in such a manner that students would be exposed to selected issues of man. It was felt that the adult might be led to increased understanding of the values of liberal studies, might seek to acquire further insights into his own nature, and might pursue educational endeavors heretofore not perceived as available or as pertinent to his own area of specialization or his everyday activities.

The study program is entitled Basic Issues of Man, and represents the integration of a basic group of intellectual issues which are vital to man today and which reflect key issues man has faced throughout history.

The adult liberal studies program was designed to stimulate the participants in the program to develop a broader perspective of life; i.e., to see the possible relations of his own life and experience to the problems concerning the nature of man, and society and its institutions. Also, the program is intended to stimulate the participant to critical and informed thought.

CONTENT MATERIALS

The general content of the course is presented through (1) a series of six texts dealing with specific issues, and (2) a series of twelve films correlated with and as an adjunct to the issues presented in the texts. The texts were prepared by University of Georgia faculty and staff and have the following titles:

- The Nature of Man
- Man and Society
- Political Perspectives
- Creativity and the Arts
- Scientific Life of Man
- Philosophical Perspectives

The Reading Materials

These texts deal with the six major content areas of the program, described in the Program Manual as follows:

> The program commences with man himself and the problems of his own nature. It moves next to society and selected problems emerging from involvement with social environment and social experience. One aspect of social life--politics--is so all-pervasive and all-embracing that it has been singled out for separate treatment as the third issue area. These three areas--the nature of man, the social life of man, and the political life of man--present the substantive issues.
>
> The next three content areas, making up the last half of the program, examine issues involved in three of man's major approaches to dealing with problems of his existence.
>
> Man interprets his experience through art in its diverse forms. In the artistic approach to life, man fuses the powers of intellect, feeling, intuition, and mysticism in the creation of interpretations and responses to life; in so doing he has created artistic forms and styles to communicate these interpretations to his fellow man.
>
> The second major approach of man to the problems of his existence is through science. Broadly interpreted, science is a systematic approach to discovery of answers to man's questions. Through the years, scientific man has developed guiding principles and methodology which enable him to discover and verify knowledge, to predict and control events--in short, to use science in dealing with the problems of living.
>
> As thinking man has made use of art and science in dealing with his basic problems of living he has attempted to rationalize the problems of his existence into a consistent and systematic whole. As stated

by Professor Newsome in Volume Six, "Man was forced to philosophize in order to make sense of, and give meaning to, his own existence and that of the world around him." Through philosophy, man seeks to develop "rational systems of explanation" of life as he finds it. Thus, man through art, science, and philosophy attempts to deal with the problems of his own nature and of the world around him as it affects and is affected by his own existence.

Two additional content areas were considered--the economic life of man and the religious life of man--and omitted for the practical reason that their inclusion would have made the program too lengthy. These aspects of man's life are dealt with in this program only as they are related to the content areas treated, but have been arbitrarily excluded as separate focal points.

The content material for each area was selected, organized, and presented by the individual author. There was no prior master outline for all six areas. Such unity as exists in the content is a product of the major theme of and the general approach to the program, and also of the fact that the authors are heirs to a common civilization and an academic tradition which have some degree of unity within diversity. The reader can trace certain unifying strands throughout the content areas.

First of all, there is concern for man himself--his welfare, his dignity, his worth. This is not to say that man is always pictured as noble, worthy, happy, and blessed, but rather that he often seeks to be so and sometimes, in some measure, succeeds.

A second unifying strand is fundamental concern with freedom. What are the dimensions of freedom? What should they be? How can man resolve the contradictions involved in achieving the values of freedom together with other values associated with peace and order and efficiency? How, too, can the contradictions be resolved in the achievement of freedom for one man or one group when there is consequent restriction of the freedom of other men and other groups? The desire for freedom is felt by even the young child, yet the problems of freedom are so complex that the wisest man cannot fully penetrate and comprehend them.

A third common concern is purpose and function. Why is man here? What should he do? What is society for? What does it do for man? What should it do? What are the purposes and the functions of government? What are the roles and what are the contributions of art, science, philosophy?

A fourth strand of common concern has to do with process and method. How does man live? How does society operate? How does government exercise its function? How does the artist work? What is the scientific method? How does one philosophize?

A fifth strand is closely related to the nature of basic problems and issues themselves: how can man cope with the contradictions--the polarities--of his existence? Can he be, for example, both self-seeking and other-serving? What is his response to inner conflict between feeling and reason? Should the State be both master and servant of man, and under what conditions should it be the one or the other? How can man enjoy the beneficent fruits of science and avoid its harmful effects? Should scientific activity pursue the inherent logic of its subject-matter (pure science) or should it be directed toward the solution of human problems and the meeting of human needs (applied science)? Are such contradictions as the preceding real or is there a balance between the extremes which man can, should, and does seek?

Finally, there is common concern for the application of various value-beliefs to the betterment of the human condition. What are the consequences of alternative value-beliefs in terms of life choices? The authors devoted little attention to this question other than to sharpen the issues and pose the questions either directly or implicitly. Application is the responsibility of the reader and the participants in the study groups. If the participant believes that the evil in man is stronger than the good, what conclusions might he draw about the kind of educational systems needed? Or, more personally, how should he rear his own children? If he believes that man's action is governed more by reason than by appetite, what kind of government does he believe is most suitable? Or again, if he concludes that his own personal life is guided more by self-seeking than by other-serving, what kind of occupation should he engage in? If he believes that government can be a positive good, what is his reaction to...government-supported medical care for the aged?

A more specific summary of the content of the six texts was written for a promotional brochure which condenses a detailed outline with page references printed in the Program Manual. This summary is as follows:

THE NATURE OF MAN begins with a brief historical sketch of varied beliefs about human nature and treats in greater detail different points of view about man suggested by such paired concepts as theism and humanism, the evil and good in man, the individual and society, reason and appetite, unity and diversity, adaptation and creativity. (76 pages).

Part One of MAN AND SOCIETY poses four basic problems: social determinism versus free will, or the question of what, if anything, individual men can do about the societies in which they live; social cohesion versus social disintegration, or what the forces are which hold society together; social equality versus class and caste, or the bases for access to and distribution of social opportunities and rewards; social stability versus social change, or how and why social change takes place. Part Two traces in broad strokes social thought and social practice in Western Civilization to document issues raised in Part One. (149 pages).

POLITICAL PERSPECTIVES presents major points of view about the nature of the political order, the purposes and functions of government, the processes of government, and the relations of nations. The author uses the device of presenting an introductory essay delineating each issue, followed by selections from original sources that feature major proponents of the various points of view ranging from Pericles to Hitler, from the National Association of Manufacturers to Karl Marx, and from Thoreau to Paul Douglas. (157 pages).

CREATIVITY AND THE ARTS discusses four issues in Part One--Nature of the Artist: Man Among Men or Ivory Tower Dweller?; The Creative Process: "Fine Frenzy" or Hard Work?; What are the Characteristics of a Work of Art?; What are the Functions of Art? Part Two presents selected works of art and analyzes them in terms of issues presented in Part One. Included are Tennyson's poem "The Lotos-Eaters"; Marion Montgomery's short story "Always the Pig Got Out"; the balcony scene from Shakespeare's "Romeo and Juliet"; and Picasso's "Guernica." (120 pages).

SCIENTIFIC LIFE OF MAN commences with the drawing of a balance sheet of science, weighing the results of science which have been good and bad for man, and posing the ethical question of man's use of science. This is followed by a discussion of conditions favorable to scientific progress. Four chapters present a brief history of scientific development. The volume concludes with a discussion of the implications of modern science for philosophy and religion and a brief look at the future, suggesting foreseeable advances in science and their possible social consequences. (133 pages).

PHILOSOPHICAL PERSPECTIVES raises six fundamental questions--What is Philosophy?; What is the Nature of Reality?; What can Man Know?; What is the Good?; What is Right and Just?; How may Man Cope with Conflict and Uncertainty? The author defines each of these problems and then presents a range of major views from classical to present-day philosophy. (142 pages).

The Viewing Materials

Two films accompany each of the six volumes. It was felt that these should be viewed after reading the printed materials, and since these were not mere pictorial reproductions of the written material they did at times introduce new ideas and issues which were correlated with the main themes of the printed texts. The films generally deal with issues and problems in which attitude-formation has occurred or is in the process.

The specific films, and their content and style as described in the Program Manual, are:

First Film: "Nature of Man"

Content: The first portion of the film is largely background material, showing that throughout history the question "What is Man?" has received varied answers. The film notes some of the dominant answers in the major periods of history from prehistoric times to the mechanistic universe of the nineteenth century.

The second portion of the film treats the key issue, "Is man basically evil, basically good, or a complex mixture of both?"

Out of these flows the third section of the film, which touches briefly on some of the contrasting views of man, and their consequences.

Style: "Nature of Man" was filmed entirely in old Mexico. The major portion of the film was shot in the state of Chiapas, which lies near the Guatemalan border. The cast of Mexican Indians is almost exclusively from the Chamula and Zinacanteco tribes.

Certain elements of the film give it qualities we usually associate with a so-called "art film." The camera makes a particular attempt, for instance, to exploit the photogenic qualities of the Mexican Indian and the architecture and landscape of the region. Also the music is native to the particular region of Mexico. This locale was chosen by the film producers because it offers simultaneously startling contrast and unity. There are primeval forces such as active volcanoes, and in some areas sea coast which appears untouched by modern civilization. The remains of ancient cultures, Mayan and Aztec, exist side by side with modern highways and industrial growth. There are both pagan elements and medieval Christianity in the religion of the people. A zest for living is apparent in primitive festivals and there is a sharp awakening of interest in learning.

Further, the film makers desired to accent the universality of the problems inherent in the study of the nature of man.

Second Film: "Final Thaw"

Content: "Final Thaw" picks up the subject introduced at the conclusion of Part One of the printed volume and touched lightly in the final part of the preceding film--contrasting views of the image of man. This subject is covered at more length in Part Two of the printed volume and is also the basis for the conversation in "Final Thaw."

The content of the film is presented literally in five sections. The film makers re-phrase and slightly rearrange the section headings used in the printed materials and have added one section which is perhaps a re-appearing theme in Dr. Chambliss's work. After brief scene and plot setting, the subject matter emerges early in the dialogue. The sections of the film are introduced by the following questions:

(1) Am I really a free individual or am I the product of society?

(2) Am I a creature of God or am I simply a highly developed animal?

(3) Am I ruled by reason or by appetite?

(4) Can I truly know myself and be myself--and still take others into account?

(5) Must I adapt to the "way things are," or can I creatively change my environment?

Style: The film is basically a conversation between four people placed in a position where nature will decide their fate. The "plot" is certainly not new and is intended only as a suitable framework for a discussion of problems which in the final analysis are very personal matters. Therefore, the film makers chose to present through individual characters the arguments for and against contrasting images of man.

Third Film: "Sometimes Harmonious, Sometimes Not"

Content: The opening portion of the film offers a definition of a society and outlines the major purposes of societies. The first issue is then stated: What are the major forces which hold a society together? These are identified as religion, physical power, cultural values, "popular will," and economics.

The second issue introduced in the film is the problem of determinism versus free will, which is also stated in this form: Are you at the mercy of social forces or can you act individually to change society? The arguments for each viewpoint follow. Next an impressionistic store window sequence depicts the struggle and interplay between determinism and free will and leads to the final portion of the film, which points out that man can act upon deterministic forces through adaptation, innovation, and control.

Style: "Sometimes Harmonious, Sometimes Not" is largely a series of sequences of emotional imagery. The narrator who appears before and after each sequence serves two functions. First, he introduces and summarizes the sections, which are presented in impressionistic style. Second, through him the film makers lightly satirizes the traditional character of educational television, often "the man behind the desk" or "the man in the gray flannel drape."

The "free will versus determinism" conflict is summarized by a film fable sequence which takes place in a store window. Mannequins come to life, threaten the window dresser with murder, and ultimately the characters settle down into an accepted form of life--half determined, half free. Observing all this through the window are cartoon figures symbolizing the stereotyped reactions of mankind.

Fourth Film: "Step by Step"

Content: "Step by Step" explores two major social questions. The first is "Should society be organized to provide equal benefits to its members?" The following points are offered as background to the issue:

- The major social benefits or rewards are wealth, prestige, power.
- These rewards are not distributed equally.
- Access to these benefits is often according to social "class."
- Social mobility (the movement of people upward or downward from one class to another) is an important factor.
- There are several theories as to the proper basis for distributing the benefits of society.
- In the United States most people claim they are not "class conscious" but may nevertheless rank others by class consciously or unconsciously.

The second question examined is "Why and how does social change take place?" This section of the film follows these points:

- Theories as to sources of social change include (1) class antagonism, (2) population shifts, (3) economic determinism, (4) scientific and technological changes, (5) "great man" influence, (6) "great idea" influence.
- There is conflict in our society over any social change which leads to a more equal distribution of social benefits (this section is pertinent also to the first issue in the film).
- Social change can take place through persuasion, of one or more types, including (1) imitation, (2) interaction, (3) education, (4) propaganda.
- Social change can also take place through force, such as (1) conquest, (2) revolution, (3) the established law.

Style: The first portion of the film examines the life of one Marvin Costa, an individualist who has obtained a large share of society's rewards, who has been very mobile upwards in the prevailing social pattern, and who now resists any change in that pattern.

The pictorial style is dramatic-documentary. The second (and shorter) portion of the film sees Costa in conflict with his associates in a battle over policies which would either accept or resist social change. Again, the film makers present ideas emotionally and dramatically through individuals in an attempt to obtain active response from the viewer rather than passive observation.

Fifth Film: "A Political Animal"

Content: "A Political Animal" introduces two issues covered in some detail in the volume. However, the film narrows its examination of the issues to the conflict between democracy and totalitarianism.

The first issue is stated early: "Should the State be master or servant of its people?" The arguments for each viewpoint are juxtaposed thus:

(Servant)	Man is capable of reason; therefore he can govern himself.
(Master)	Only a few can make intelligent decisions; the masses must be directed.
(Master)	Environment determines man's life; therefore the State must create an environment which will cause individuals to serve in the interest of the State.
(Servant)	The individual is all important; men form governments only to gain advantages they cannot otherwise have.
(Servant)	All men are born with certain rights and in this respect are equal.
(Master)	Human inequality is undeniable; the State must stand above society.
(Master)	Unity of effort requires governments which will suppress conflict between the classes.
(Servant)	Citizens can arrive at best choices through unrestricted debate and discussion.

The second issue is posed as: "What are the proper functions of the State?", or, "What should government do and what should it refrain from doing?" First are presented certain major opinions prevalent where the State is considered servant of the people (limited government). The range of opinion is shown as follows: (1) extreme individualism, (2) moderate individualism, (3) empirical collectivism (welfare state), (4) moderate socialism. Arguments and examples follow in support of each opinion. Then the case for "unlimited government" is presented. As a prelude to this section facism and communism are contrasted. Communism is used as an example of a society in which the proper functions of government know no limits. The arguments for this type of unlimited government are presented by a spokesman "representing" communism and are infused with the technique of propaganda which the communists use in attempting to influence others. At the conclusion, the viewer is reminded that man was not born to be forced and that in this massive conflict it is necessary to weigh the arguments carefully.

Style: The film presents a political debate which takes place not in a realistic setting but symbolically in the mind of the thoughtful, inquiring person. The leading characters are two representatives of opposing political systems and an inquiring man. Into a "hall of political thought" the protagonists draw a variety of people, symbols, and graphics to substantiate their arguments.

Sixth Film: "Public Hearing"

Content: Following up the issues introduced in "A Political Animal," on whether the State should be master or servant and the proper functions of the State, this film examines one major point: How shall government exercise its functions? Near the opening there is a brief re-cap of the issues of the previous film. Then comes a statement of the issue to be examined here. It is framed in a comparison between governmental procedures in the United States and those in the Union of Soviet Socialist Republics. The comparison is brought out through reports by members of a United States "Senate committee" and testimony by a "defecting Russian."

The content generally follows this outline:

- identification of the location of power and authority in the Soviet Union.
- examination of the Soviet promise of a "utopianism" versus the democratic citizenry's desire for more immediate benefit.
- explanation of how power is distributed in the Soviet Union.
- explanation of how the broad directions of government are determined in the Soviet Union.
- discussion of use of propaganda and political "education" in the Soviet system.
- arguments for centralized direction as in the USSR.
- discussion of whether the occasional "professed" changes in Soviet policy are real or temporary.
- reference to the difference between methods of choosing government officials under the two systems.
- description of how decisions are made and executed in the USSR.
- explanation of how changes in United States governmental procedures and policies take place.
- consideration of differences in interpretation and application of law under the two systems.

The above points are brought out in the simulated congressional hearing scene. Further points, particularly concerning the democratic system, are underlined in the interview scenes which follow:

- identification of the location of power in the United States.
- further explanation of the United States method of interpretation and application of the law.
- explanation of how power is distributed in the United States.

There is a brief summary of some key comparisons and the film closes with only passing reference to another political issue discussed more fully in the related text: Nationalism versus Internationalism versus Universalism.

Style: This film is a follow-up of "A Political Animal" in content only. The style is completely different. "Public Hearing" is a simulated congressional hearing--the kind of setting which readily permits examination of the procedures of government. The "hearing" itself is an example of how the United States government carries out some of its functions. The defecting Russian is afforded the type of free discussion and debate which is basic to our democracy, even though during the hearing it is discovered that he actually seeks to make use of this forum to accent his traditional Marxist views on coexistence and deviation.

Seventh Film: "Composition...In 3 Parts"

Content: As the title implies, there are three parts to the film. The first deals with creativity as it applies to all men and gives attention to both the creative process and the creative product. The content in this section is drawn from various sources, and in general will not be found in the related volume.

Part two, rather than considering the broad subject of creativity, shifts to the fine arts and deals with the question "What is the nature of the artist?"

Part three takes up the creative process--with examination again limited to the fine arts. This portion of the film has four subdivisions: inspiration, the period of gestation, construction and revision, and finally, communication to an audience.

Style: Creativity always implies adding something to nature. The film makers have attempted to use this principle throughout the film, which itself is a creative product.

In part one (creativity for all men) subjective imagery is used to show how life experiences shape personality; how dissatisfaction with what is leads first to inquiry and then to creativity in man's attempt to achieve something more satisfying. The "musical" accompaniment is not formal music, but rather a composition of sounds from life combined with electronic effects.

In part two, the conductor is shown as symbolic of all artists, and though he speaks in the first person singular he speaks for all artists. Some of the "drawn" portions of the visual sequence are taken from an eighteenth century theater engraving; others are done in the style of the Commedia Dell' Arte productions of the eighteenth century Italian theater. The concert music is Mozart's Sinfonia Concertante.

Part three, through pictorial symbols, describes inspiration, gestation, and construction and revision; for example, gestation is illustrated by the camera's following the meanderings of a broken fence as it appears and disappears in the sand dunes of a lonely beach. Finally, the artist must communicate, and the picture returns to the concert--this time showing the audience.

Eighth Film: "Pegasus Without Wings"

Content: The film is a dramatization of incidents surrounding a citizen's donation of a statue for the town square. The statue, a piece of iron sculpture, is received with mixed emotions by the public. As controversy over the sculpture increases, acts of vandalism occur.

The film is concerned with the artist and his audience. The issues examined can be summarized as "What are the characteristics of a work of Art?" and "What are the proper functions of Art?"

Style: "Pegasus Without Wings" is a story-line film adapted from a real-life incident.

Ninth Film: "The Return of Prometheus"

Content: This film takes up two issues which face man today as he attempts to understand and to use science. Before the first issue is clearly stated there is a definition of science, purposely oversimplified; then the opening sequences include these pertinent points:

- there is a difference between pure and applied science.
- all humans have inherent tendencies toward scientific inquiry, which they apply to natural observable phenomena.
- there have been periods of history relatively barren of scientific achievement, while other periods have seen great development.

Treatment of the foregoing leads to the first issue: Are there certain conditions favorable to scientific development? It is suggested that there are and some of these conditions are identified and discussed:

- the pressure of knowledge
- utilitarian need
- the presence of superior individual(s)
- financial support
- free intellectual climate.

The second major issue is posed: Is Science good or bad for man? It is suggested that the desirability of creating conditions which would foster scientific development should be based upon the answer to the question. In this portion of the film a sort of "balance sheet of science" is presented: first, the arguments that the results of science have been bad for man, and second, the arguments for the opposite view.

Finally, it is suggested that science can be either good or bad for man depending upon his use of it. Man's responsibility in the wise use of science is posed as a challenge as the film ends.

Style: "The Return of Prometheus" centers on a banquet honoring a truly great scientist for a basic scientific discovery. Flashback and "thought voice" techniques are extensively interwoven with scenes of present action. This permits cutting away from realism to symbolism and allows visualization of the principal character's thoughts. For instance, the scientist's banquet speech has been extremely candid. He has stated, almost bitterly, his concern that the results of scientific development may actually be bad for mankind. As he speaks, a nightmarish sequence depicts the visual images which pass before his mind's eye. Later, the scientist reconsiders his harsh words, and his reflections on the positive values of scientific development are visualized in a sequence stressing serenity and beauty.

Tenth Film: "There Be Dragons"

Content: The preceding film closed with the suggestion that science itself is ethically neutral--that the use of scientific development for good or for bad is the responsibility of all men.

This film restates that challenge and uses it as an underlying theme. Science is on the threshold of offering man startling new developments. Will the problem of greater population be served by new sources of energy, salt-water conversion, harvesting food from the sea? Will improved communications techniques help us to understand each other better, or will they be controlled by those who would destroy the freedom of the individual? Will the potential of genetic control be used to rid us of disease and pain and free our minds for wisdom, or will the characteristics of future generations be determined by computer machine selections?

The film ends on a hopeful note, suggesting that if man gains the understanding to use scientific development for good he may thereby rid himself of physical problems and free his mind to gain wisdom.

Style: The opening, closing, and occasional bridging sequences are realistic. They take place in a hospital delivery room during the birth of a baby. The problems of the future are presented in fantasy sequence and take place in the mind of a woman during delivery. The doctor represents Science; the woman represents Mankind; and the baby, never seen, represents future generations which, like ourselves, must decide how to use the developments of science.

Eleventh Film: "The Sentence Is Life"

Content: "The Sentence Is Life" draws upon only the first chapter of the appropriate reading material, but actually the content of the film is even more restricted, since the film makers selected only portions of that one chapter. The film touches on the question of "What is Philosophy?", but concerns itself almost exclusively with another question referred to in the written material--is philosophy of any use to most of us? The volume phrases the question in this way: Does the common man need to be concerned with philosophy?

The key figure in the film is an ambitious young man who has "no use for philosophy." In conversation with someone who believes the opposite, the following arguments are presented:

- man has philosophized through the ages.
- philosophy is concerned with basic issues or problems and not with questions which can be answered with facts alone or which are matters of taste.
- one's use of philosophy is to give thoughtful consideration to one's personal identity and direction in life.

Whisked from this "realistic" scene into the realm of fantasy the young man sees two philosophical wrongdoers sentenced before the "philosophical court of last resort." One is sentenced because he believes that philosophy is totally a matter of theory rather than a human enterprise. A simple definition of philosophy is included in this sequence. The second wrongdoer represents the isolationist attitude "live and let live."

The second fantasy scene, in an artist's studio, is the framework to present the following points:

- the two major types of western philosophy are called rationalistic and empirical. The terms are explained very briefly.
- philosophy is not faith; it is not "common sense"; it questions all ideas labeled fact.
- philosophy organizes and interprets experience by analysis, synthesis, and projection.

Returning to the philosophical court of last resort these points are made:

- philosophy means love of wisdom.
- philosophy provides benefits such as a frame of reference, the power to make decisions, and the power to find meaning in a world of change and uncertainty.
- philosophy has importance to all men.

Included in the above sequence are the negative arguments that philosophy is futile and places any stability of universal verities in danger.

Style: The main body of the film is fantasy in which it is implied that the argument concerning the value of philosophy takes place in the hero's mind. Thus the nightwatchman in his normal life becomes the arresting officer and the prosecutor; the boss of the original scene reappears as the judge; and the young man's fiancee appears as an artist's model.

Twelfth Film: "Golden City"

Content: The key question examined in "Golden City" is related to all the preceding content of the program as presented in the written and filmed material. *Can man find a way to cope with uncertainty*? Our forebears applied nineteenth century scientific belief in a mechanized universe to their social, political, and economic life; and, in so doing, built a Golden City characterized by materialism and standardization--affluent, by such standards, beyond the most optimistic dreams of its historic creators.

Man's experience with the Golden City of today is less than satisfying. New problems are generated which make man unsure of his beliefs and uncomfortable in his insecurities. He questions his one-time easy optimism. Meanwhile, twentieth century science has replaced the concept of a mechanized universe with that of an *uncertain* universe.

Can man use uncertainty as a stimulus to the creation of stronger and more satisfying new commitments? Can he achieve an "unstable equilibrium" through which he finds himself by continuously fashioning, but never finishing, the Golden City of his dreams?

Style: The first part of the film is intentionally deceptive in style. We are given a view of "Golden City" history, growth, present "glory," and future potential, much as might be presented in a chamber of commerce promotion film. Suddenly a doubtful voice intrudes, questioning the validity of the picture which has been painted. Then beneath the surface of citizens' comments we glimpse the presence of uncertainty and stagnation. Finally, the narrator himself steps out of his "neutral" status to take a personal position, pinpoints the problem of uncertainty in Golden City, and holds out a challenge for the future.

Discussion

Discussion is the third major element in the Basic Issues of Man program. The texts and the films form the basis for all three major participant activities--reading, viewing, and discussing. While the texts and films were prepared prior to the actual offering of the program and their contents can be described, the content of discussion was created by the discussion groups in the program process and depended upon the abilities, tastes, interests, and resourcefulness of the discussion leaders and participants.

Group discussion was included in the program to give each participant an opportunity:

- to explore his previous experience, his knowledge, his values, his feelings, and even his hunches, for application of thought to the issues discussed;
- to crystallize his thoughts and communicate them as accurately as possible to others in the group;
- to react to ideas of other people and experience the reaction of others to his own ideas;
- to test his ideas against the ideas of others who brought to the discussion different backgrounds of experience and viewpoints.

Furthermore, since the content materials in the program deliberately present varying points of view about the issues, it was recognized that differences of opinion and values between participants would arise inevitably. Group discussion was planned to provide a forum which could foster identification and definition of differences, exchange of information, and reasoning bearing on these differences, and the application of resulting thought to relevant life situations.

Summary and Objectives

By its nature, the Adult Liberal Studies Program is experimental. The breadth of purpose and technique encompasses areas of knowledge concentrated in such a manner that the student should be aware of the vital relation of these studies to himself. The stated objectives of the program are not, therefore, to create a situation in which the student can learn scholarly facts per se, but rather they are to create a situation in which the student can become alive to the vital links of fact, tradition, and ideas that give meaning and depth to the world which he inhabits. From this basic postulate concerning the purpose, the general objectives of the program derive. These objectives were stated in the Program Manual as follows:

> This program sees [illegible] the chief value outcome of liberal education. Education for a free man contrasts sharply with education for a social slave. Although it is admitted that social conformity and social adaptability are needed characteristics for even

a free man, the crucial difference is that the free man can choose that to which he conforms. Professor Chambliss, in Volume One of this series, The Nature of Man, states the same point in another way: "...the kinds of freedom man achieves, and the kinds of chains he endures: that is choice, the basis of human dignity."

Education for the free man is based on the proposition that the opportunity and the ability to make significant judgments, decisions, and choices are critical conditions and requirements of freedom. Although this program recognizes and concerns itself with the dimensions, limitations, and complexities of freedom, it nevertheless asserts that freedom exists in proportion to the breadth and significance of the choices available to man, and to his capacity to recognize, understand, and react to choice-making situations.

The judgment required in choosing a dinner menu item is of small consequence in comparison with judgment as to whether or not man is sufficiently rational to govern himself. The former is a matter of taste, the consequences of which are fleeting and affect primarily the individual making the choice. The latter is of grave importance and social concern, the consequences of which can affect the function and structure of government and the human condition of millions of people. This program, therefore, is based on the proposition that there are fundamental and persistent issues which have faced mankind continuously, at least in Western civilization, and further that there is a relationship between these persistent issues and the crucial choices man makes in his day-to-day activities. Expressed in another way, the proposition states that man develops viewpoints and values, consciously or unconsciously, about basic issues and these concepts have relevance for the significant choices he makes in the daily round of life.

The Basic Issues of Man program does not present the answer to any of the issues treated. Instead, in keeping with the concept of the free man as the chief value outcome of liberal studies, the program attempts to identify recognized persistent problems and issues, explore their dimensions, examine alternative viewpoints in both their current and historical contexts, and thus stimulate the program participant to:

- expand his appreciation of basic issues through increased perception of their complexity and of the generality of their effects on the individual and on society;

- make intellectual choices about issues through a process of reflecting upon, evaluating, organizing, and articulating related value-beliefs;

- increase and direct his information-seeking activities about the problems and issues discussed in this program, as well as about others not treated specifically.

Therefore, it is hoped that the participant will perceive a wide range of significant intellectual and practical choices posed by living in today's world, will broaden and deepen his understandings and insights about the dimensions and significance of these choices, will enhance his capacity to choose effectively, and, in so doing, will initiate a continuous pursuit of liberal learnings.

PART II THE THEORETICAL ORIENTATION

THE PROBLEM

THE purpose of this research is to evaluate the effectiveness of the combined use of various communication media in achieving the major objectives of an educational program of liberal studies and to gain insight into their applicability for adult audiences. The media to be tested are films (or televised films), books, and group discussion. These media are used to present the content materials of the Adult Liberal Studies Program. This research analyzes the contribution of the combinations of media to learning, in order to determine their most relevant, suitable, and efficient use in achieving the major objectives of the educational program. The content materials of the program were designed and developed with financial assistance from the Fund for Adult Education. Evaluative research planning was initiated after the content materials for the program were developed.

OBJECTIVES

The evaluation objectives are based upon the educational design of the program. The objectives are derived from considerations of the introductory nature of the program and its emphasis on fundamental problems rather than on traditional academic disciplines. In this study, an attempt will be made to assess the desired products of the Adult Liberal Studies Program. These are:

1. To increase appreciation for the problems
2. To change beliefs about knowledge
3. To increase and channel information-seeking activities related to the problems

It is expected that the outcomes of the program will be realized to differing extents among the variety of combinations of learning situations and media to be investigated.

Thus, it is important to find out how the various combinations of educational situations and informational resources are related to the achievement of the objectives. More specifically, it is important to know how interaction is related to the objectives of the program; how the informational resources, alone and combined, are related to the success of the program; and what the joint effects of interaction and the informational resources are.

BACKGROUND AND IMPORTANCE OF THE PROBLEM

This adult education program and its evaluation may be described as an attempt to provide and "measure" changes in "motivation" as it relates to the program objectives. The general problem of motivation or drive is not a matter of prime interest. All of the participants presumably were motivated in this sense. The variable of concern here is the direction which the pursuit of liberal education takes and the degree to which this direction can be structured. Of prime interest, also, is the possibility of enabling educated people to undertake, independently, fruitful intellectual activity.

The objectives of the program are appropriate to the type of participant recruited for the program, to the means of "instruction," and to the subject matter. It was anticipated that the typical participant would be a high school or college graduate, in the medium to higher income brackets, between 30 and 50 years of age, and probably with previous experience in one or more other adult liberal studies programs. Evidence collected in pilot studies strongly suggested that much of the subject matter in the sampled content areas of the program did not strike many participants as "new," "strange," or "different." What participants in the pilot studies seemed to gain was a word, a phrase, a context, or a frame of reference which enabled them to organize and reorganize their previous thoughts.

The program is not concerned with the retention of factual content for its own sake. Rather, it is concerned with the use made of factual content by the participant in appreciating more fundamental problems and formulating knowledgeably intelligent means of dealing with them.

This statement is an interpretation of the educational objectives of the program. It is felt that the specific evaluation objectives are in accord with the intentions of the program's designers. In fact, the evaluation objectives of appreciation of problems and channelization of information-seeking activities seem congruent with the intention of the producer of the films used in this program:

> We believe that the material with which we are dealing...requires that the films be aimed primarily at viewers' attitudes rather than at viewers' knowledge. In other words, as we expose the roots of big [problems]...we will not present any part of the whole tree for close examination. We will in effect say to the audience:
> - This is a problem;
> - It has been a problem for a long time;
> - This film should help you recognize the problem;
> - All people do not agree about this problem or how to solve it;
> - If you wish to make an intelligent personal decision, you should look into the problem further.
>
> I believe that we need to look at the above in the light of the television viewer who is not involved in any [organized] study of this problem when he views the programs.[1]

Although the content of each film is derived from the books, all of which are written in narrative form, the filmic styles vary widely. Some of the films use a dramatic style, others use an "art film" format, and some are documentaries. Each filmic style was chosen for its ability, in the producer's opinion, to convey best the particular problem.

This program, then, can provide a test of television's effectiveness, under conditions of artistic "license," for achieving the desired outcomes of the program. Whether books or television alone are adequate for realizing the desired results and/or changes will be important.

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[1] Unpublished memorandum from Associate Director, Communication Services, to Director, Center for Continuing Education, University of Georgia, Athens. June 22, 1959, p.2.

Two of the film-book combinations present an opportunity to observe the utility of a kind of "feedback" mechanism. By "feedback" we mean the effect of either informational resource (television and books) upon the other. To find out whether exposure to both resources is significantly superior to contact with either separately in both educational situations is also important.

Of interest also is the process of functional interaction as it may relate to realizing the objectives of the program. Functional interaction can be defined as comments which serve to expand or extend the line of discussion; that is, the comment functions as a stimulus to further discussion on the part of the original speaker or another speaker. Interaction, then, is that part of the discussion in which the participants' behavior is coordinated toward some common objective. It is plausible to expect that interaction provides opportunities for clarifying the participants' ideas and for the exchange of ideas.[2] Interaction also can provide the participants with experiences which tend to lead to appreciation of the problems raised in the program. It was expected that these products of interaction[3] may be necessary conditions of the objectification[4] of value-beliefs[5] which are instrumental in changing beliefs about knowledge.[6]

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2. Our definition of interaction and our conception of its importance are similar to some of the dimensions of interaction presented in: Interaction in Learning: Implications for Television. Washington, D. C., National Education Association, 1959. See especially, pp. 10-15.

3. Note the possibility that interaction among participants may also result in undesirable consequences. For example, the development of ego-defensive attitudes may preclude the development of patterns of fruitful interaction.

4. This term is used to refer to the process of behavior frequently called reflective thought. John Dewey has emphasized the process in a "problem-solving" context. George Herbert Mead has emphasized the capacity of the person to take his "self" as an object of his concern. This is very close to our meaning--the person takes his value-beliefs as an object of his concern. Our approach is congenial with some suggestions about the problem of "thought" presented in the cybernetics literature. Objectification is a potential control mechanism in that the person can deliberately compare his behavior and his value-beliefs for their relation, if any.
   In other words, objectification refers to a process of deliberate thought. See: John Dewey, Human Nature and Conduct; G. H. Mead, Mind, Self and Society; and Norbert Wiener, The Human Use of Human Beings.

5. Although both overt (dialogue with self and others) and covert (dialogue only with self) interactions are of interest, prime concern is with the former.

6. "Beliefs can be seen as the cognitive embodiment of attitudes. All attitudes incorporate relevant beliefs about the object of the attitude, but it can be said, conversely, that all beliefs are part of attitude structures. Beliefs, as such, are motivation and emotionally neutral, though, of course, motivational forces may have played a part in the process of the formation of the beliefs." David Krech and Richard S Crutchfield, Theory and Problems of Social Psychology (New York: McGraw-Hill Book Company, Inc., 1948), p. 152.

Interaction per se is not the only matter of interest; its usefulness as a supplement to an informational resource for the kinds of educational objectives is also of interest. Such considerations could present a useful contrast to the suggestions that content retention is increased when (closed circuit) television is supplemented by discussion.[7] It is not known whether or not this general finding will result when the objectives are concerned with changes in perception or belief.

RELATED LITERATURE

Liberal adult education is an extensive field and encompasses most of the areas of knowledge. It is usually voluntary, lacks direct economic incentive, and its pursuit is largely determined by personal values and satisfaction. The problem of gaining and holding constituents and of offering what is desirable is one of special significance for adult education.[8]

Because of this situation, the need has arisen for research of a sharply differing nature from that which characterizes other educational endeavors. Non-vocational adult education has few, if any, entrance requirements, and few other specifications such as grades, degrees, etc. Generally, research is available from agencies and institutions which differ markedly in purpose and objectives.

In approaching the literature, our concern is not with the chief areas or the subject matter, but with selected research pertaining to the educatee, such as interests, cognizance, acceptance, and interaction.

The discovery and measurement of attitudes and inferences concerning change focus on the products of social interaction, i.e., on social attitudes. Adult education is in this sense a practical social force in that it deals with and specifies the concept of attitudes. The nature of attitudes implies that they are "organizations of psychological processes with respect to aspects of the individual's world."[9] Psychological processes and the functional nature of attitudes specify the import of understanding attitudes as related to adult education--this is that attitudes do not "form or change simply as discrete cognitive units, but that for any one individual or for any group attitudes exist in functional interdependence with other attitudinal, motivational and value components."[10]

To our knowledge, study designs comparable to this one have not been devised in the adult field. Numerous programs in the liberal studies for adults exist and some have been researched, but none with the particular combination of media which are used in the Adult Liberal Studies Program. The research information obtained from this program should have a unique position in the research literature on adult education.

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[7] William H. Allen, Audio-Visual Communication Research (Santa Monica, California: System Development Corporation, 1958), p. 51.

[8] Edmund DeS. Brunner, David S. Wilder, Corinne Kirschner, John S. Newberry, Jr., An Overview of Adult Education Research (Adult Education Association of the U.S.A., Chicago, 1959), pp. 1-7.

[9] Krech and Crutchfield, *op. cit*.

[10] Brunner *et al*., *op. cit*., p. 51.

HYPOTHESES

From the problem, the objectives of the study, and these basic assumptions, the following general hypotheses can be stated:

1. That the effectiveness of the content materials included in the Adult Liberal Studies Program will be evidenced by attitudinal changes relating to the acceptance, cognizance, and channelization of problem issues; and

2. That the types of learning as measured by attitudinal change in this liberal studies program will vary significantly with the combination of informational resources and educational situations.

VARIABLES

In determining the relative effects of varying educational situations and informational resources upon participants in the Adult Liberal Studies Program, a number of variables were isolated.

Variables in the first category are causative or "independent" and are based upon the educational objectives of the program. The "independent" variables are:

A. Informational resources. This variable consists of the types and combinations of resources used in the Adult Studies Program. The two content components of this variable include:

    1. The series of six texts, and

    2. The series of twelve films.

   Variations upon these resources range from the situation where no informational resources are available to the situation where all of the resources are available. Within this range, three informational resources and one control situation form the components of this variable (i.e., no resources; films; books alone; and films and books in combination).

B. Educational situations. The educational situations that are logical for the objectives of the program and appear most salient for this research design are:

    1. Subjects studying alone, or with no planned groups or discussion, and

    2. Subjects studying in discussion groups, i.e., the situation where discussion is conditioned by trained discussion leaders.

   Educational situations introduce the variable of interaction among subjects as another program input over and above books and films. Interaction will be assumed in group situations and not assumed in the "alone" situation. It will also be assumed that the effects of interaction can be measured by evaluating the difference between situations 1 and 2 above.

A second category of variables is constituted by the variables that are "dependent" in nature. These variables will be measured by scales relating to various dimensions of change occurring within the study population.

The variables concerning attitudinal change as it is related to the objectives of the program are:*

1. To increase appreciation and cognizance of problem issues to change

2. To change beliefs about knowledge

3. To increase channelization of information-seeking activities related to the problem

4. Basic ability to accept change.

Scales have been adapted and constructed, and will be utilized in measuring the attitudinal changes which result in relation to the above stated objectives.

A third category of variables is made up of the ones that can be viewed as "intervening" variables. These variables do, in some instances, exist independently, but they will be assessed as they "condition" and "influence," or otherwise generally specify the relationship between the independent and dependent variables. There are two general groups into which these measures fall. The first group is that of "background" variables that will be considered as intervening for this study. These are:

1. Age
2. Residence
3. Sex
4. Marital Status

The second group involves variables that are both background and intervening in nature but will be considered as intervening variables. These are:

1. Education
2. Occupation
3. Income

In summary, both the "independent" and "dependent" variables, the combinations of resources and situations, and the objectives respectively, present useful opportunities to add to the store of knowledge in the study of the goals and means of adult liberal education. And, the "intervening" variables, interaction, and other program-related activities, may provide us with a key for understanding the dynamics of the combinations. The dynamics, in turn, may allow us to generalize our findings fruitfully.

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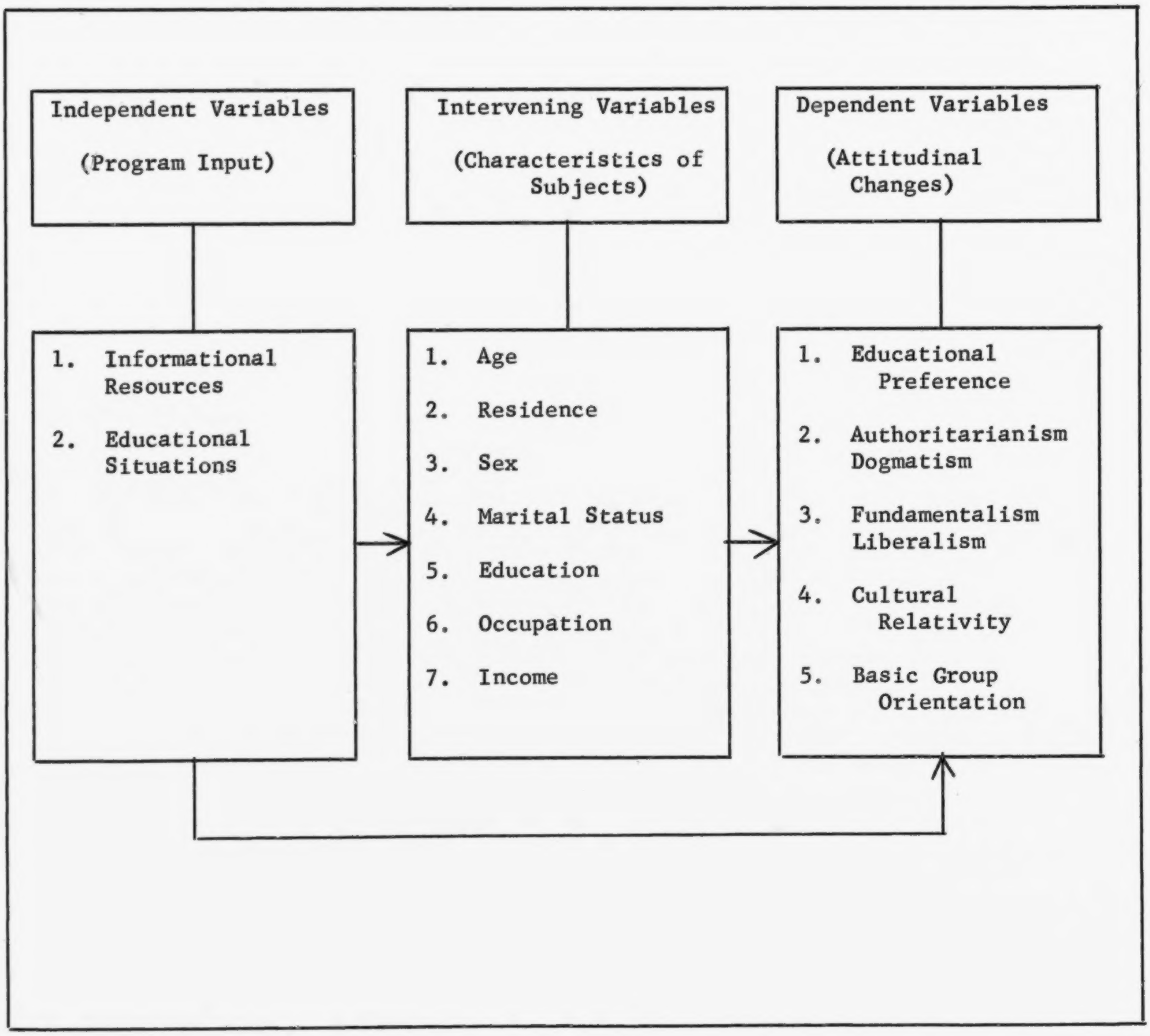
*These changes represent the desired outcomes of the program as stated in the section on objectives.

A diagrammatic scheme which illustrates the types of variables conceptualized for this evaluation is as follows:

Figure 1

Types of Variables



Independent Variables
(Program Input)
Intervening Variables
(Characteristics of Subjects)
Dependent Variables
(Attitudinal Changes)
1. Informational Resources
2. Educational Situations
1. Age
2. Residence
3. Sex
4. Marital Status
5. Education
6. Occupation
7. Income
1. Educational Preference
2. Authoritarianism Dogmatism
3. Fundamentalism Liberalism
4. Cultural Relativity
5. Basic Group Orientation

PART III METHOD AND SAMPLE

Introduction

THE objectives of this evaluation are based upon the educational design of the program and are derived from considerations of the introductory nature of the program and its emphasis on fundamental problems rather than on traditional academic disciplines. In measuring the "outcomes" of the program, it was anticipated that the products would be realized to differing extents among the variety of combinations of educational situations and informational resources to be investigated.

In general, the prime objective of this research is to find how the various combinations of educational situations and informational resources are related to the achievement of the objectives of the program. More specifically, it is the purpose of this research to examine the process of interaction as it is related to the success of the program, and the joint effects of interaction and the informational resources, and how the various measures of the objectives are interrelated.

The specific aspects of the research design, the locale, the sampling procedures, the instrument, and the sample characteristics will be presented in this chapter.

RESEARCH DESIGN

As a method of ascertaining the relative effects of a number of combinations of educational situations and informational resources in testing the basic assumptions and objectives of the Adult Liberal Studies Program, the following combinations of resources and situations to be compared were proposed. Each represents an experimental group and is represented by a letter in the "cells" of Table I.

Table I: The Combinations* of Informational Resources and Educational Situations to be Evaluated

	Informational Resources			
Educational Situation:	None	Television	Books	Television and Books
Alone	A	B	C	D
Discussion Group	E	F	G	H

*Each cell is a combination of the elements of the resources in that column and the situations in that row. Thus, combination A, a control group, provides no information to isolated individuals.

The combinations of educational situations and informational resources to be investigated in this study (See Table I):

A. "None-Alone." This control group will not be exposed to any form of informational resources. N of 50.

B. Isolated Viewer of Television Programming. "Isolation" refers to the lack of a formally organized discussion group in which to participate. Essentially, the formal participation of the isolated viewer in the program is limited to viewing thirteen half-hour television programs, one a week, which are based upon the contents of the books. N of 50.

C. Isolated Readers of the books. Formal participation is limited to the reading of six relatively short manuscripts. The tempo of reading, clearly, is at the reader's discretion. N of 50.

D. Isolated Viewer-Readers. Formal participation is limited to reading the six manuscripts and viewing the thirteen films related to the same material. N of 50.

E. "Uninformed" Discussion Participants. This is a control group utilizing discussion without a formal informational resource (reading materials and films). This combination, and the next three, refer to once-a-week meetings, each lasting an hour and a half, over a thirteen-week period. The leaders for each of the discussion combinations were specially oriented for discussion leadership in this program. N of 50.

F. Organized Viewing-Discussion. The group engages in discussion, with the television films serving as the informational resource. The group viewed the films immediately before the discussion period. N of 50.

G. Organized Reading-Discussion. The group engages in discussion, with the manuscripts (with study guides) serving as the informational resource. The reading was done at the discretion of the individual participant, although the meetings were held weekly. N of 50.

H. Organized Viewing-Reading-Discussion. N of 50, two groups of 25 each.

Participants to fit into various cells in the study design were recruited from a population of urban adults interested in leisure-time adult liberal education.

All participants were told beforehand that they would be participating in an experiment which would attempt to compare different ways of presenting the program. Participants were allocated to experimental groups representing various combinations of media and situation by random procedures.

The data for this evaluation were collected through the use of paper and pencil questionnaires, self-applied. The instrument consisted of a series of attitudinal measures relating to the "dependent" variables, which are based upon the educational objectives of the liberal studies program.

Since the concern was with the measurement of the effects of communication media on attitudes, beliefs, and activities related to the objectives of the adult educational program, the time element was an important aspect of the study design. The assumption of change prescribed some point of reference for change.

In this instance, this point theoretically existed before exposure to the media. The means of expediting the change prescription involved drawing a pre-test sample and a post-test sample. The pre-test sample was taken immediately before the program began and the post-test sample was taken three months after the completion of the program.

During the early formulative and structuring phases of the research, some question existed concerning the wisdom and feasibility of carrying out the "complete" design of the study. There were eight treatment groups, with Groups A and E being the main control groups. Of these two control groups, Group A appeared to be more theoretically related than Group E, because of the vague nature of Group E. Group E is only "theoretically" possible, because any discussion leader would be forced to use informational resources drawn from television and/or books or elsewhere. Otherwise, there would be no program-related information, and thus the same situation would be produced as with control Group A, the members of which may (and probably did) participate in unrelated types of discussion groups. It was anticipated that if any group was to be sacrificed because of the demands of time and the difficulty in recruiting groups for a relatively large sample, the first group to be eliminated would be Group E.

Ideally, it would have been desirable to utilize existing organizational structures and other existing formal organizations for the recruitment of participants in the eight "treatments." Although this technique of recruiting participants was desirable and efficient, and had been previously used, it was not methodologically sound for the research purposes of this study. The reason is that the method utilizes the content materials as a content program rather than for the purpose of research concerning the program. Another methodological consideration was that the program should not be tied to any one organization in order to avoid the introduction of a selectivity bias into the sample.

Another desirable situation would have been to have some higher education organization sponsor the program in the local community. Then it would have been possible to allocate participants to "treatments" in these communities. Again, this situation, although desirable, was not entirely possible since higher education organizations did not exist uniformly over the state or uniformly in a given region. In instances and communities where these organizations did exist and were practical for recruitment of participants for the differing treatment types, they were utilized. The important fact is that it was impossible to use these organizations uniformly.

Another plausible consideration was to make the program available to some groups or organizations that desired the program as an addition or a correlate to some existing study program. This situation, although satisfactory, would have been less desirable than either of the other two situations, because of the transitory nature and impermanence so often characteristic of these groups.

Considerations of "ideal" or "most obvious" arrangements for recruiting participants in the program were not feasible, for the reasons given. Also, another aspect of the program precluded the recruitment of individuals from these types of organizations: the program had to be economically self-supporting. This means that the cost of providing educational materials for all participants would have been prohibitive, although some of the expenses (such as payment of discussion leaders and provision of films), would have been defrayed by the research project. There was general consensus too, that for some existing groups the costs for the program would introduce the bias of economic selectivity in the sample.

LOCALE

All of the individuals and groups (with the exception of the individuals in the control groups) surveyed for this study were located in Georgia. In accordance with the study design, all of the variable educational situations and informational resources groups were initiated and formed through the facilities of the Georgia Center for Continuing Education and its field services staff.

SAMPLING PROCEDURES

In selecting the number of participants needed to fill the cells of the design, many considerations were made. Obviously, the nature of each treatment differs, but, considering all combinations, there are categories based upon situations and resources that are more alike than others. The same organizing principles for data collecting techniques seemed applicable to each of these categories. From the study design, there are three broad categories. These are:

1. The combinations that use all informational resources and both educational situations (Isolated Viewer-Readers and Organized Viewing-Reading-Discussion)

2. The combinations that use one educational situation and one informational resource (Isolated Viewers, Isolated Readers, Organized Viewing and Discussion, and Organized Reading-Discussion)

3. The control combinations ("None-Alone" and Uninformed Discussion Participants)

The procedures for selecting participants for each of the groups that fulfill these combinations and constitute the sample for this study will be discussed in this same order.

The research design specified that participants were to be allocated to experimental groups representing the various combinations by random procedures. Since the utilization of specified organizations and existing organizational structures for recruiting participants in the various combinations was not practical, the most feasible solution appeared to reside in the recruitment of participants for both categories (excepting the control category) in communities that had an educational "flavor" or "connection"; i.e., most ideally, had a college or some particular arrangement to offer college extension courses and other educational programs in the community (examples: extension divisions, small colleges). Location within or outside of the range of the facilities of the Educational Television channel was another consideration in selection.

The next step in arranging for participants in the program was to identify the range of possible communities meeting the specified criteria and possessing the particular attributes most utilitarian for the purposes of the study: communities that had a college, or an extension division of a college, or an arrangement for college courses to be taken for credit, or had some relative proximity to a college community, or were communities in which there would be some appeal for the type of content materials offered in the Basic Issues program. Another consideration was that these community types could be categorized on the basis of their expediency for the different treatment types in the study design.

The total number of communities meeting the criteria as specified above was 32. These sample communities were selected after careful study by the project directors, with prime consideration being given to those communities that most closely met all of the requirements for inclusion.

After the sample communities had been identified, advisory steering committees were planned for each separate community. Organization of the local steering committees for the planning and promotion of the program was carried out by the conference coordinators and other staff members of the Georgia Center for Continuing Education. The staff personnel assigned to the project were instructed to select a "contact" person to arrange for a luncheon or dinner meeting with local community leaders. It was specified that the contact person (and/or chairman of the committee) should be the chief executive officer of a college or local school system or a designated member of his staff.

The chairman (or contact individual) was then asked to select the other members of the committee, which should be not less than four or more than six additional persons. Unless there was an expedient reason to do otherwise, it was desirable that the head librarian of the public library should be included as a committee member because of his/her direct contact with and knowledge of the type of person who would most likely be interested in the Basic Issues of Man program. In addition, it was desirable wherever possible to include a leading clubwoman, a leading businessman, and a leading professional man on the committee. It was important that representatives be mature and intellectually curious, with a zest for dealing with ideas. It was also desired that they be the types of persons whose ideas are listened to with respect by other adults.

After the chairman had appointed the committee, the group was invited to attend a luncheon or dinner meeting with a staff member and representative from the Georgia Center. The major purpose of this meeting was to get those attending to agree to serve as a local steering committee to help the Georgia Center sponsor, promote, arrange for, and conduct the program in the local community. The Georgia Center representative was host and chairman for the meeting, and explained the program. In instances where the committee decided to work with the Georgia Center in offering the program, the representative assisted in developing the necessary plans and procedures.

After the program was explained and an introductory film was shown, the following questions were raised:

1. Do you feel this is a program that might be worthwhile to offer in your community?
2. Do you think that as many as fifteen or twenty people might enroll in such a program?
3. Would you be willing to serve as a steering committee, with perhaps some additional persons to work with the Georgia Center in promoting and arranging for the program?

It was at this point that most of the practical questions came up and that final commitments and plans for the program were made.

In many instances, it was anticipated that some of the members selected for the committees would be individuals who had served in similar advisory capacities or in other "service"-connected endeavors relating to adult education programs sponsored by the Georgia Center for Continuing Education. Structuring the advisory committee in this manner lent authority to the program, and utilized knowledge concerning recruitment of the most desirable type of participant.

The first task of the steering committee was the recommendation of a discussion leader for the program and the compilation of a list of nominations of potential participants in the program.

As stated previously, the general criteria for selection as a participant was that: "the individual would be a high school or college graduate, in the medium to higher income brackets, between 30 and 50 years of age, and probably with previous experience in an adult liberal studies program."

The steering committee was asked to identify a person or persons to contact in priority order who would serve as a discussion leader for the program. The following criteria for selection were suggested. It was understood that probably in no instance could a person be found who could meet them all; the list was intended only as a guide to selecting the best available person.

The leader should:

--hold an earned advanced degree beyond the baccalaureate, preferably in the broad fields of the humanities or the social sciences, with background in philosophy, sociology, psychology, and political science in general. A broad liberal arts background is preferred to a narrow professional background.

--have had experience as a teacher, particularly in courses which use the seminar and discussion method rather heavily. Experience in informal teaching involving discussion leadership--such as in Sunday school classes or Great Books discussion groups--is a useful supplement to formal teaching experience, and in many instances a substitute.

--be the type of person whose expression of ideas is listened to with response by other adults in various community activities.

--be a "star of attraction" type of personality--the kind of person people enjoy associating with when he is in a leadership capacity. This does not mean that we need a professional "how to win friends and influence people" person, but rather one who is warm and effective in human relationships without the overtones of a synthetic personality calculated to bowl people over and exploit them.

--be the type of person who is interested in getting other people to express their ideas, and is not compelled to tell other people what to think. This does not mean he should be a person who has no ideas of his own, or one who is unwilling to express the ideas he has, but rather that he should not be so authoritative that he must try to make other people think as he does.

--be the type of person who is intellectually curious and has a zest for dealing with ideas.

--be a reader--of better books and magazines.

Note:

--If qualified in other ways, a college teacher or public school teacher would seem preferable.

--As a matter of policy, do not select ministers. It is recognized that in many instances a minister would be the best qualified person; but some ministers (and some members of the religious groups to which they belong) because of theological and religious conviction find it difficult to lead objective and free discussion of many matters which will be dealt with in this program.

In summary, although sponsorship of the program and its implementation could not be attained in the most ideal manner, a realistic and methodologically sound plan for recruiting participants was devised. One strength of the method used in selecting participants was that local people were asked to help promote the program and were asked to suggest participants and discussion leaders. This approach, it seemed, would yield the greatest returns for implementation of the program and for its research function. Also, sponsorship of the program became a local community concern.

After the advisory committee submitted its initial list of nominations for participants and its recommendation for a discussion leader, two intermediate steps in implementation of the program were undertaken.

First, plans were made for a training session for the discussion leaders. It was to be a full week of residence training carried out through the facilities of the Center for Continuing Education at the University of Georgia and with the assistance of its professional staff. The session was to be financed by the Adult Liberal Studies Program and would involve a stipend for the attending discussion leaders.

The length of time originally proposed for the training session (1 week) was shortened to three days (a weekend), because most discussion leaders were involved in professional types of occupations and found it difficult to arrange an absence of such relatively long duration.

The training session was carried out in the early fall of 1963. The first day was devoted to an introduction of the content and methods of the Adult Liberal Studies Program. An overview of the total program was given, designed to instill the basic research implications of the program as well as to demonstrate desirable techniques in presenting it. The content materials of the program were given to each discussion leader. These included a set of the books, and other related content materials. Also, the films were shown. In this manner and by this method, the matter of familiarization and "look and feel" was carried out.

After the initial familiarization with the program in the introductory phase of the training, a session on discussion techniques followed. Instruction consisted of identifying points for clarification in the texts and films, and of identifying important values, ideologies, and attitudes that would likely result from exposure to the content materials. Also, discussion leaders were familiarized with the instruction manual designed to supplement the content materials of the program. The last day of the training session was given to a practical application of the techniques and methods that had been introduced during the preceding sessions. A variety of approaches was introduced, with main emphasis upon flexibility and imagination in dealing with the different ways in which discussion might channel itself.

The second step in the development of the sample for the reading-viewing-discussion cell involved promotion of the program and securing participants.

It was decided that participants should be secured on a personal invitation basis. Each local steering committee had been asked to compile a list of 40 to 80 prospects, with names and addresses. A personal invitation was mailed from the Georgia Center to each prospect on the list. The local committees were notified when the invitations were sent out, in order that the members of the committee might contact the invitees personally and urge their enrollment in the course. Members of the local committees were asked to enroll without charge and were expected to form the nucleus of the group.

Each staff member of the Georgia Center who was actively engaged in setting up the program and working with local steering committees was provided a news story for release to the local newspapers and radio and television stations prior to the compilation of the list by the steering committee. The story used the organizational meeting as the event and explained the program, stating that enrollment in the program was by invitation only, and naming the members of the local steering committee. Although the news story did not solicit individuals to express an interest in participating to the members of the steering committee, it was hoped that some would do so. The invitation from the Georgia Center contained an enrollment card which was to be returned to the Center, and the local steering committee was notified of the names of all who had enrolled.

Tuition for the course was $30.00, which included cost of the reading materials. If two members of the same family enrolled, the fee was $50.00, including one set of reading materials--unless family participants requested two sets, in which case the fee was $60.00. The minimum desired size of the group was set at 15 persons (absolute minimum, 12), and it was decided that 25 persons should be the maximum, since a larger group would be hard to manage as a study-discussion group. It was decided that in some instances the program could be offered with only 12 enrollees, but generally so small a group was undesirable and was to be permitted only in isolated instances.

Arrangements were made with the public librarian for securing a thirty-volume reserve bookshelf. It was desired that these volumes be housed together with a proper sign indicating "Basic Issues of Man - Reserve Bookshelf." The purchase of the books was authorized from local funds by the state librarian.

Local plans and arrangements were specified on the basis of whether the communities were within or outside the range of the Educational Television Network sponsored and operated by the University of Georgia.

For all communities within the range of the television network, the sessions were held on Monday evenings running from 7:30 to 9:30, with the television program to be viewed at 8:00.

In communities outside of television range, meetings were held on different nights, Monday through Thursday, with a staggered schedule, so that there would be an equal number meeting on different nights of the week. This arrangement was necessary in order that a limited number of films could be shipped from one community to another.

As attractive a meeting place as could be found was arranged for. Generally, the furnishings allowed from 15 to 25 participants to group around tables in a circle, square, or U shape. A flip-chart was provided and in some instances a chalk board. Also, a way of serving coffee or cokes was arranged as an adjunct to the meetings.

The control combinations portion of the sample constituted by the "None-Alone" Group and the "Uninformed" Discussion Participants Group was to be recruited from conference groups in residence at the Georgia Center for Continuing Education. It seemed that there were many groups in attendance at the Center whose constituency fulfilled the requirements of this portion of the total sample. These control groups had specifications for participants that required a complete absence of exposure to the informational resources. Many conference groups met this specification, since some conferences were regional in nature and some were composed of participants living in regions outside of the television viewing range. Participants in these groups who had exposure to the educational media were asked not to participate in the study and to refrain from filling out the questionnaire. A post-test questionnaire was not planned, since the situation involved no prior informational resources.

In recruiting participants for the program a number of limitations were foreseen. The first of these involved the fact that participants were to be allocated to a combination and the allocation would be based in part upon noncontrollable factors (e.g., location inside or outside of television viewing range, lack of, or inability to find a qualified discussion leader). It was anticipated that some individuals who did not find themselves allocated to a combination which met their original intentions might not wish to participate in the program.

Another possible limitation in the recruitment of participants appeared to exist in the tendency of some groups to be class related and differentiated. Past experience with the recruitment of special interest groups for research purposes has indicated this tendency, and it was anticipated that many of the types of participants that were desirable for this research would be excluded on this basis.

A remaining limitation was brought about by the rather large number of participants needed to fill the cells of the design. Discussion groups were limited to a maximum of twenty-five persons who must reside in the same general community. An attempt was made to limit the participants regardless of whether the size of the city was a relevant variable for the conceptual design of this study.

Fifty participants were allocated to each combination, making a grand total of 400. It was anticipated that there would be variations in the number recruited for each combination, and that possibly some cell combinations might not develop. If recruitment appeared more successful for one combination than for another, and if participants could not be allocated because of noncontrollable factors, then an overabundance of groups would be the result. The logical implication was that the N's for some combinations would be larger than for others.

An N of 50 seemed adequate for our immediate purposes and for contemplated further analyses of the data. Sufficient personnel were not available for data collection problems posed by an appreciably larger N.

THE INSTRUMENT

From the broad generalizations concerning the objectives of the program as they were related to the problem and to the purpose of the research came many specific theoretical considerations. The design of the research instrument was based upon the assumption that one could start with generalizations of a broad scope and convert these into specific areas of investigation through the use of a structured interview administered in questionnaire form.

The instrument for this research was designed to include those variables having specific theoretical linkage to and testing the content and method of the Adult Liberal Studies Program (Basic Issues of Man). Specifically, the instrument was designed to include variables that would test the methods and assess the products of the Basic Issues program by determining the adequacy and differential effects of: (1) the situation, (2) the media, (3) the interaction patterns, (4) the patterns of participation, and (5) changes in attitudes affecting values, beliefs, and ideas.

In determining the relative effects of differing situations and resources upon the attitudinal change of participants in the program, a number of variables were conceived.*

The first type of variable in the study design included criteria involving the objectives and methods of the Basic Issues of Man program. This variable included the informational resources and the educational situations, and assumed the processes of interaction resulting from the differing combinations of the resources and situations. This constitutes the independent variable for the study.

The second category consists of variables that are dependent in nature and in various ways specify attitudinal change as it is related to the stated objectives of the program.

There is a third category of variables, comprising those that are both background and intervening in nature. Age, residence, sex, occupation, education, marital status, and income form the components of this variable.

The dependent variable, which involved the dimension of attitudinal change, was studied by the use of various scales developed and adapted from a variety of sources. Scale type items relating to the appreciation and cognizance of problems, beliefs, and attitudes about knowledge, the channelization of information-seeking activities, and the acceptance of change were tested before the instrument was constructed. Specific scales were then adapted for each of the dimensions of change and were utilized in the instrument.

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*This is a brief summary of the objectives and research variables that were presented in Part II. It is presented here as a preface to this section and is intended as a guide for the reader.

INDEXES AND METHOD OF INDEX CONSTRUCTION

The index items for the dependent variables were derived from the literature concerning change as it related to the objectives of the Basic Issues of Man program.

The index items relating to the appreciation and cognizance of the generality, complexity, and importance of basic problems were adopted and constructed, using various pre-tested questionnaire items which appeared to be potentially useful for scale analysis.[11] These items were selected from the existing literature concerning conformity dimensions and social issues.[12]

The Authoritarianism-Dogmatism Index and the Cultural Relativity Index measuring the conformity dimension were constructed using techniques and methods applicable to similar existing formulations. The Fundamentalism-Liberalism Index was constructed in the same manner, and the items in it were selected from the existing literature concerning the acceptance, appreciation, and cognizance of problem issues.[13]

The index items relating to beliefs and attitudes about knowledge were adopted from a series of studies measuring attitudes toward education and school courses.[14]

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[11] Muzafer Sherif and Carolyn W. Sherif, An Outline of Social Psychology (revised edition; New York: Harper and Brothers, 1956), Chapters 15 - 18. Also see Wilbur C. Hallenbeck, "A Sociologist Looks at Adult Education," Adult Education, Vol. VII, No. 3, Spring 1957, p. 135.

[12] Gordon Allport, "Attitudes," Handbook of Social Psychology, Carl Murchison (ed.) (Worcester, Mass.: Clark University Press, 1935); and David Krech and Richard Crutchfield, Theory and Problems of Social Psychology (New York: McGraw-Hill Book Company, 1948). Also see H. H. Remmers, A Scale to Measure Attitudes Toward Any School Subject (Lafayette, Indiana: Purdue Research Foundation, 1960).

[13] E. L. Hartley, R. C. Hartley, and C. Hart, "Attitudes and Opinions," in W. R. Schramm (ed.), The Process and Effects of Mass Communication (Urbana: University of Illinois Press, 1954); and T. W. Adorno et al., The Authoritarian Personality (New York: Harper, 1950), Chapter VII. See also Richard Christie and Marie Jahoda (eds.), Studies in Scope and Method of "The Authoritarian Personality" (Glencoe, Illinois: The Free Press, 1954). Also see Morris Janowitz and D. Marvick, "Authoritarianism and Political Behavior," Public Opinion Quarterly, 1953, XVII, 185-201; and Milton Rokeach, The Open and Closed Mind (New York: Basic Books, 1960).

[14] Harry C. Eckhoff, "General Educational Development Tests in Adult Education," Adult Education Bulletin, June 1949, pp. 144-49; and James Duncan and Burton Krietlow, "Selected Cultural Characteristics and the Acceptance of Educational Practices and Programs," Rural Sociology, December 1954. Also see Max Birnbaum, "Mind and Emotion in Adult Education," Adult Education, Vol. VII, No. 3, Spring 1957.

The Basic Group Orientation Index was contructed to measure the channelization of information-seeking activities relating to social problems. Items were adopted from a variety of sources purporting to measure the variable.[15]

The Guttman scaling technique was utilized for index construction, but Guttman scales could not be constructed using these items for this sample. The Guttman technique was utilized for index construction for two reasons: (1) it was desirable to see if Guttman scales could be constructed using these items for this sample; and (2) the simple-scoring method served as a means of weighting responses for each item.

Most of the items had 5 categories (some had 3) from "strongly agree" through "undecided" to "strongly disagree." In the five scales that were used, the simple-scoring method served as a means of weighting responses for each item. The most ambiguous of the original items for each index were eliminated on the basis of a lack of a valid cutting point.

For two of the indexes, all of the original items could be eliminated because valid cutting points did not remain for each item when the scaling process was completed. In the other three indexes, by the same process, enough of the original items could be eliminated, so as to make the index meaningless. The responses of all pre-test respondents were considered, in attempts to construct the indexes.

In regard to selection of items for attitudinal measures to be included in the questionnaire, it should be noted that the items for the five attitudinal measures were chosen on the basis of a pre-test sample constituted of participants in varying conferences at the Georgia Center for Continuing Education. Using the same scaling techniques for this randomly-selected sample, these items did in fact differentiate attitudes relating to change among the respondents in the pre-test of the questionnaire.

Since the Guttman technique could not be used with this sample, cumulative indexes were constructed by the method of weighted scores and arbitrarily assigned cutting points. With this technique, using the same items and response categories in all of the indexes, each item was weighted in favor of the response indicative of the most favorable attitude for the item, and these items formed a cumulative composite score for the index. None of the original items were eliminated from the indexes. Cutting points for each scale were arbitrarily established at the median of each range for each index. Responses of all respondents in the pre-test were considered in constructing the indexes.

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15. R. A. Beals, Aspects of Post-Collegiate Education (New York: American Association for Adult Education, 1935). Also see W. E. Styler, "The Motives of Adult Students," Adult Education (London), 23, September 1950; and Wayne Dennis, "Adult Interest as Related to Education," Interests and Abilities of Adults and Techniques of Adult Education, University of Virginia, 1935. Also see B. J. James and H. W. Montross, "Focusing Group Goals," Adult Education, Winter 1956.

Educational Preference Index

A multiple index was designed to distinguish between those who expressed a preference for certain types of educational programs and those who had no preference. This index was designed to relate to the dependent variable involving beliefs and attitudes about knowledge. The educational preference index consists of the following items:

Item	Response	Weight
I would like to have this type of education.	A preference	1
	Ambivalence	2
	No preference	3
This type of education enriches life.	A preference	1
	Ambivalence	2
	No preference	3
This type of education will aid in becoming a more moral person.	A preference	1
	Ambivalence	2
	No preference	3
This type of education will provide me with a great deal of valuable information.	A preference	1
	Ambivalence	2
	No preference	3
This type of education will aid in reducing doubts about life.	A preference	1
	Ambivalence	2
	No preference	3
This type of education will contribute very much to the individual's personal development.	A preference	1
	Ambivalence	2
	No preference	3

Item	Response	Weight
This type of education will aid me to become a more insightful person with broader perspectives.	A preference	1
	Ambivalence	2
	No preference	3
This is a type of education I know I would enjoy.	A preference	1
	Ambivalence	2
	No preference	3
This type of education will permit me to become a more effective person in living.	A preference	1
	Ambivalence	2
	No preference	3
This type of education will provide a sound basis for my basic beliefs.	A preference	1
	Ambivalence	2
	No preference	3
I expect that the Georgia Adult Liberal Studies Program will be this type of education.	A preference	1
	Ambivalence	2
	No preference	3

Distribution of Scores

		N
Pre-test		
High	(13-33)	150
Low	(11-12)	151
Post-test		
High	(13.4-33)	151
Low	(11-13.3)	150

Scale Scores

Treatment	Average Scale Scores		Total Scale Scores	
	Pre-test Sample	Post-test Sample	Pre-test Sample	Post-test Sample
Full Treatment	1.42	1.38	1909	1841
Books and Films	1.50	1.27	532	457
Books Alone	1.57	1.32	349	300
Films Alone	1.06	1.17	185	215
Films and Discussion	1.36	1.33	809	831
Books and Discussion	1.30	1.14	599	529

Authoritarianism-Dogmatism Index

This is a multiple item index designed to measure the conformity dimension relating to the appreciation, acceptance, and cognizance of problems. The index consists of the following items.

Here is a list of some things we have heard people say. If you heard these statements, would you be likely to neither agree nor disagree, agree pretty much, or agree very much? (Make only one check for each statement.)

Item	Response	Weight
Human nature being what it is there will always be war and conflict.	Agree very much	5
	Agree pretty much	4
	Neither agree/nor disagree	3
	Disagree pretty much	2
	Disagree very much	1
The most important thing a child should learn is obedience to his parents.	Agree very much	5
	Agree pretty much	4
	Neither agree/nor disagree	3
	Disagree pretty much	2
	Disagree very much	1
A few strong leaders could make this country better than all the laws and talk.	Agree very much	5
	Agree pretty much	4
	Neither agree/nor disagree	3
	Disagree pretty much	2
	Disagree very much	1

Item	Response	Weight
Most people who don't get ahead just don't have enough will-power.	Agree very much	5
	Agree pretty much	4
	Neither agree/nor disagree	3
	Disagree pretty much	2
	Disagree very much	1
Women should stay out of politics.	Agree very much	5
	Agree pretty much	4
	Neither agree/nor disagree	3
	Disagree pretty much	2
	Disagree very much	1
People sometimes say that an insult to your honor should not be forgotten. Do you agree or disagree with that?	Agree very much	5
	Agree pretty much	4
	Neither agree/nor disagree	3
	Disagree pretty much	2
	Disagree very much	1

Distribution of Scores

		N
Pre-test		
High	(21-30)	152
Low	(6-20)	149
Post-test		
High	(19.9-30)	151
Low	(6-19.8)	150

Scale Scores

Treatment	Average Scale Scores		Total Scale Scores	
	Pre-test Sample	Post-test Sample	Pre-test Sample	Post-test Sample
Full Treatment	3.76	3.73	2727	2725
Books and Films	3.18	3.22	627	638
Books Alone	3.77	3.33	471	400
Films Alone	2.64	2.69	269	269
Films and Discussion	3.36	3.41	1201	1175
Books and Discussion	3.35	3.28	851	803

Fundamentalism-Liberalism Index

This is a multiple item type of index indicating the orientation of people toward their basic beliefs. This index also involves the conformity dimension, as it is indicative of the appreciation and cognizance of problem issues. It consists of the items listed below.

Item	Response	Weight
I feel very much pride in my basic beliefs.	Strongly agree	3
	Uncertain	2
	Strongly disagree	1
I am sometimes unsuccessful when I try to put my basic beliefs into words.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3
I think that the person who doesn't know exactly what he believes probably doesn't have basic belief.	Strongly agree	3
	Uncertain	2
	Strongly disagree	1
I have doubts about the rightness of my basic beliefs when I think about them.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3
I find that one part of me says my basic beliefs are right and another part of me says they're wrong.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3
It isn't good to think about your basic beliefs too much.	Strongly agree	3
	Uncertain	2
	Strongly disagree	1

Item	Response	Weight
I'm not always sure I know what I really do believe.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3
I'm not always certain that I have basic beliefs.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3
Personally, I think it's better to be certain about the rightness of my basic beliefs than to have doubts about them.	Strongly agree	3
	Uncertain	2
	Strongly disagree	1
I know exactly what I believe.	Strongly agree	3
	Uncertain	2
	Strongly disagree	1
I am sometimes unsuccessful in trying to explain my basic beliefs to other people.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3
I have some basic beliefs I'd prefer not to have.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3
I sometimes find that I worry about my basic beliefs.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3

Item	Response	Weight
It isn't good to doubt the rightness of your basic beliefs.	Strongly agree	3
	Uncertain	2
	Strongly disagree	1
Personally, I don't consider it bad or undesirable if a person isn't exactly sure of what his basic beliefs are.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3
I have no doubts about the rightness of my basic beliefs when I think about them.	Strongly agree	3
	Uncertain	2
	Strongly disagree	1
Really, there isn't much logic to my basic beliefs: I just have them.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3
I have difficulty putting my basic beliefs into words.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3
I think that people who can't explain their basic beliefs usually don't know what they believe.	Strongly agree	3
	Uncertain	2
	Strongly disagree	1
Personally, I don't consider it bad or undesirable if a person had difficulty putting his beliefs into words.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3

Item	Response	Weight
I am sometimes ashamed of my basic beliefs.	Strongly agree	1
	Uncertain	2
	Strongly disagree	3
I don't always find it easy to maintain or hold on to my beliefs.	Strongly agree	3
	Uncertain	2
	Strongly disagree	1

Distribution of Scores

		N
Pre-test		
High	(45-66)	148
Low	(22-44)	153
Post-test		
High	(44-66)	151
Low	(22-43)	150

Scale Scores

Treatment	Average Scale Scores		Total Scale Scores	
	Pre-test Sample	Post-test Sample	Pre-test Sample	Post-test Sample
Full Treatment	4.90	4.81	13585	13195
Books and Films	5.08	5.33	3624	3613
Books Alone	4.98	5.16	2292	2357
Films Alone	5.59	5.38	1838	2001
Films and Discussion	4.93	4.89	6278	6267
Books and Discussion	5.42	5.35	4975	4892

Cultural Relativity Index

This three-item index was designed and adapted as a second substantiating measure of cultural relativity concerning basic beliefs relating to the appreciation and cognizance of problems. The index consists of the following items:

Please go through the statements below, one at a time, and check, for each, whether you agree or disagree a little, pretty much, or very much.

Item	Response	Weight
I don't think anyone's basic beliefs should be a basis for judging that person.	Agree very much	5
	Agree pretty much	4
	Neither agree/nor disagree	3
	Disagree pretty much	2
	Disagree very much	1
Basic beliefs are almost never a suitable topic for discussion with anyone.	Agree very much	5
	Agree pretty much	4
	Neither agree/nor disagree	3
	Disagree pretty much	2
	Disagree very much	1
People should not select their close friends only from among those who have the same basic beliefs.	Agree very much	5
	Agree pretty much	4
	Neither agree/nor disagree	3
	Disagree pretty much	2
	Disagree very much	1

Distribution of Scores

		N
Pre-test		
High	(10.5-15)	160
Low	(3-10.4)	141
Post-test		
High	(10.4-15)	151
Low	(3-10.3)	150

Scale Scores

Treatment	Average Scale Scores		Total Scale Scores	
	Pre-test Sample	Post-test Sample	Pre-test Sample	Post-test Sample
Full Treatment	3.46	3.39	1282	1243
Books and Films	3.20	3.18	317	315
Books Alone	3.43	3.13	206	188
Films Alone	2.73	2.63	134	134
Films and Discussion	3.05	3.33	543	570
Books and Discussion	3.52	3.18	451	395

Basic Group Orientation Index

A five-item index was designed to distinguish between activity and passivity relating to the channelization of information-seeking activities pertaining to basic beliefs. The Basic Group Orientation Index consists of the following items.

Now imagine that a number of people like yourself are together to talk about your basic beliefs. Give your best prediction of how you would probably act in this situation by going through the statements below and checking the best answer.

Item	Response	Weight
I would sometimes try to make tactful comments to heal any hurt feelings which might arise in the discussion.	Yes, I probably would I don't know what I'd do No, I probably wouldn't	1 2 3
I would sometimes try to pull the threads of the discussion together and try to compare the different viewpoints presented.	Yes, I probably would I don't know what I'd do No, I probably wouldn't	1 2 3
I would sometimes joke or kid, trying to find the potentially humorous implications in the discussion.	Yes, I probably would I don't know what I'd do No, I probably wouldn't	1 2 3
I would sometimes try to clarify the discussion by getting it to the point, getting terms defined, and pointing out logical problems.	Yes, I probably would I don't know what I'd do No, I probably wouldn't	1 2 3
I would sometimes provide "fuel" for discussion by introducing ideas and opinions for the others to discuss.	Yes, I probably would I don't know what I'd do No, I probably wouldn't	1 2 3

Distribution of Scores

		N
Pre-test		
High	(7.5-15)	139
Low	(5-7.4)	162
Post-test		
High	(7-15)	151
Low	(5-6)	150

Scale Scores

Treatment	Average Scale Scores		Total Scale Scores	
	Pre-test Sample	Post-test Sample	Pre-test Sample	Post-test Sample
Full Treatment	1.30	1.27	814	799
Books and Films	1.51	1.45	238	240
Books Alone	1.27	1.23	133	129
Films Alone	1.56	1.41	133	120
Films and Discussion	1.40	1.49	421	447
Books and Discussion	1.39	1.38	268	296

SAMPLE CHARACTERISTICS

A brief description of the sample is pertinent at this point in the analysis. A description of the sample communities, and of the background variables of the participants' age, sex, and social environment will facilitate the matter of relating personal characteristics and combinations of resources and situations to differences in desired outcomes of the program (the subject of Parts IV and V).

The level of analysis that will be employed will be percentage distributions from the frequency tabulation of a number of variables.

Table 2 shows the type of treatment and the communities and organizations that constituted the sample for the program. Table 2 also shows the percentage of those participants who failed to return the post-test questionnaire for each community or organization for all treatment types.

In all of the types of treatment, some communities and organizations evidenced a much higher rate of attrition than did other communities and organizations experiencing the same types of treatment. It appears that there are a number of factors involved, and that an explanation of these factors is worthwhile.

It was originally hoped that there would be enough people in differing communities over the state interested in participating in the program to enable the research directors to fulfill all of the treatment types prescribed in the research design. For a number of reasons, in many communities it was not possible to recruit enough to offer the program. Some of the reasons involved the costs of the program, some involved the amount of time required for the program, and in many instances the program simply did not have an appeal to the community. In some instances, the personnel involved in sponsoring the program evidenced too little commitment to the program to make it appear hardly worthwhile to those who might otherwise have been interested. In some instances, groups that were in session in some communities disintegrated because of lack of organization and leadership caused by competition with other groups which formed later and had more popular appeal, and because of sheer lack of interest and participation by the participants.

Of the original specification in the research design for 8 treatment types, 7 were formed. As stated in the section on Research Design, there was some question concerning the wisdom and feasibility of carrying out the "complete design" of the study. Of the two main control groups, the treatment type offering Discussion Alone was only theoretically possible, and was sacrificed because of the demands of time and because of its vague theoretical nature.

In treatment types where enough community groups could not be organized or where existing community groups disbanded, organizations in conference at the Georgia Center were recruited, and their membership served as participants in the program. Naturally, some organizations were better suited for the purpose than others, and some treatment types offered informational resources and educational situations more conducive to the nature and situation of the participants from conference groups than did others. Those specific groups and the treatment types to which they were most ideally suited are indicated in Table 2.

Table 2. Treatment Type, Sample Units, and Rates of Attrition

Treatment Type	Sample Units					
	Communities and Organizations	Pre-test	Post-test	Dif-ference	Per cent Retained	Per cent Lost
Full Treatment	Albany	8	6	2	75.0	25.0
	Cartersville	12	9	3	75.0	25.0
	Carrollton	8	3	5	37.5	62.5
	Columbus	10	3	7	30.0	70.0
	Cordele	6	1	5	16.7	83.3
	Douglas	16	10	6	62.5	37.5
	Hapeville	21	11	10	52.4	47.6
	Milledgeville	14	9	5	64.3	35.7
	Monroe	11	3	8	27.3	72.7
	Moultrie	11	4	7	36.4	63.6
	Rome	24	19	5	79.2	20.8
	Savannah	16	4	12	25.0	75.0
	Tifton	11	7	4	63.6	36.4
	Valdosta	14	11	3	78.6	21.4
	Waycross	16	9	7	56.3	43.7
	Atlanta	20	17	3	85.0	15.0
Books and Films	Landscape Design School	16	12	4	75.0	25.0
	Income Tax Institute	25	16	9	64.0	36.0
	Southeastern Correspondence Study Conference	3	2	1	66.7	33.3
	Gainesville	9	3	6	33.3	66.7
Books Alone	Augusta	33	21	12	63.6	36.4
Films Alone	Athens	11	0	11	00.0	100.0
	Georgia Educational Secretaries Association	17	11	6	64.7	35.3
	Supervisory Development Conference	12	6	6	50.0	50.0
Films and Discussion	LaFayette	22	10	12	45.5	54.5
	Chattanooga	25	16	9	64.0	36.0
	Athens	44	35	9	79.5	20.5
Books and Discussion	Classroom Teachers Work Conference	31	27	4	87.1	12.9
	Red Cross	29	16	13	55.2	44.8
Control		55	55			
TOTAL		550	356	194	64.7	35.3

Table 3 shows the number and percentage distribution of participants in the pre-test and post-test samples, along with rates of attrition for each type of treatment.

Tables showing the above-mentioned aspects for all of the participants by communities and/or organizations from which participants were recruited and treatment types would be excessively large and would impair the descriptive functions of this presentation because of the great number of categories involved.

There were 218 participants in the pre-test sample and 126 participants in the post-test sample for those receiving the Full Treatment (i.e., films, books, and discussion). Ninety-two participants, or 42.2 per cent of the pre-test sample, did not return the post-test questionnaire.

There were 91 participants in the Films and Discussion pre-test sample and 61 in the post-test sample, giving a loss of 30 participants and an attrition rate of 33.0 per cent for this treatment type.

In the treatment type dealing with Books Alone, there were twelve less participants in the post-test sample than in the pre-test sample. The attrition rate for this treatment type was 36.4 per cent.

The treatment type for Films Alone had a somewhat higher rate of attrition than did the treatment type of Books Alone. Forty individuals returned the pre-test questionnaire, while only 17 participants returned the post-test questionnaire. A total of 23 participants, or 57.5 per cent of the original sample, did not return the questionnaire.

Table 3 Pre-Test and Post-Test Samples and Attrition Rate for the Sample

Treatment Type	Pre-test Sample		Post-test Sample		Loss	
	No.	%	No.	%	No.	%
Full Treatment	218	100	126	100	92	42.2
Books and Films	53	100	33	100	20	37.7
Books Alone	33	100	21	100	12	36.4
Films Alone	40	100	17	100	23	57.5
Films and Discussion	91	100	61	100	30	33.0
Books and Discussion	60	100	43	100	17	28.3
Control	55	100	55	100	0	0.0
Total All Treatment Types	550	100	356	100	194	35.3

The treatment type involving the combination of Books and Films was composed of 53 participants who returned the pre-test questionnaire and 33 participants who returned the post-test questionnaire. The difference of 20 participants who did not return the post-test questionnaire accounted for an attrition rate of 37.7 per cent.

For those participants in the Books and Discussion treatment type, 60 returned the pre-test questionnaire and 43 returned the post-test questionnaire. Only 17 participants did not return the post-test questionnaire, accounting for an attrition rate of 28.3 per cent, which was the lowest rate of attrition for any treatment type.

Since the control treatment had no previously contrived informational resources or educational situations, the use of a post-test was unnecessary. This treatment type was simply intended as a control and any point in time was appropriate for administration of the questionnaire. There were 55 participants in this "treatment" type.

The total number of participants for all treatment groups who returned the pre-test questionnaire was 550. The total number of participants for all treatment groups who returned the post-test questionnaire was 356. One hundred and ninety-seven participants did not return the post-test questionnaire, amounting to an attrition rate of 35.3 per cent for the total sample. Considering the fact that the study was longitudinal in nature and involved a span of time between the pre-test and the post-test questionnaire, by comparative standards this attrition rate is acceptable. It should also be pointed out that the attrition rate is not indicative of the number who failed to complete the program, but is indicative only of the number of participants who failed to return the questionnaire three months after the completion of the program. Theoretically, it is possible that some participants completed the program but failed to return the post-test questionnaire, while some others could have ceased their participation in the program at any time.

Following the assumption that communities and organizations were randomly allocated to treatment types, it appeared reasonable to expect that the attrition rates for all treatment types would be relatively consistent. The data as interpreted from Table 3 indicate that some treatment types have much greater "holding power" than some others.

The hypothetical assumption of the existence of a relationship between treatment type and the rate of attrition can be examined. Table 4 shows the type of treatment and rates of attrition in the treatment types that are applicable. Chi-square is used as the contingency measure in establishing the existence of a relationship.

Chi-square, when computed for these data, was 11.04 and was significant at the .10 level. Also the Chi-square measure was only .03 off at the .05 level of significance.

For all practical purposes, then, a relationship between treatment type and the attrition rate does exist. Generally, it can be assumed that some treatment types have greater holding power than others.

A variety of interpretations can be made that would be of help in explaining the relationship. Probably the most important one is that combinations of resources and educational situations composing some certain treatment types could have posed a much greater threat to existing attitudes than did the combinations in certain other treatment types. One reaction probably was to cease participation rather than to change attitudes.

Another possible explanation is that certain treatment types, because of the particular combination of resources and situation, were selective of individuals who were resistant to attitudinal change, or conversely, were conducive to attitudinal change.

A third explanation of the relationship is that the treatment types could have evidenced differential attrition because of a general lack of training, commitment, and understanding of the content material on the part of some organizational staff members and discussion leaders.

As valid as any of these explanations may appear, the important fact is that some treatment types experienced greater attrition than did others, and this fact could in some degree have specifications for, or conditions upon the results obtained from these data.

Since this study is longitudinal in nature, the sample will of necessity be composed of those participants who returned both a pre-test and post-test questionnaire. In this manner, the comparative function can be utilized.

Table 4: Treatment Type and Attrition Rates for the Sample

Treatment Type	Retained No.	Retained %	Lost No.	Lost %	Total No.	Total %
Full Treatment	126	57.8	92	42.2	218	100
Books and Films	33	62.3	20	37.7	53	100
Books Alone	21	63.6	12	36.4	33	100
Films Alone	17	42.5	23	57.5	40	100
Films and Discussion	61	67.0	30	33.0	91	100
Books and Discussion	43	71.7	17	28.3	60	100

$X^2 = 11.04 > .10$ with 5 D.F.

Table 5 shows the percentage distribution of a number of selected variables and type of treatment for the sample. The utility of this presentation is in its descriptive functions. With reference to the sex of the respondents, all treatment types, with the exception of the one constituted by Books Alone and the Control treatment types, indicate a higher proportion of females than males.

The figures in Table 5 could possible lead to the erroneous inference that the program catered to and was designed to appeal primarily to the female audience. The explanation for the high percentage of females most likely lies in the fact that females had more time to spend with the content materials of the program. Also, females would likely have been more interested than males in the social-participational aspects of the program.

Age categories were selected on the basis of groupings that are descriptive in a "social" sense (e.g., young adult, middle age, and older). For those respondents having the Full Treatment, 50.8 per cent were 45 years of age and older; for those in the Films and Discussion treatment group, 52.4 per cent were 45 years of age and older; for those in the treatment type having Books Alone, 28.6 per cent were 45 or older; for those in the Films Alone and Books and Films treatment groups, 35.2 and 42.4 per cent respectively were over 45 years old; for the group experiencing Books and Discussion, 55.8 per cent were 45 and over, while the Control group had 58.2 per cent of its membership 45 years of age or older. These figures support the general notion that older, more mature adults were likely to be interested in the content materials and situational arrangements for the program. Also, older individuals probably had more time and effort to put into the endeavor.

In viewing marital status by treatment type, there appear to be only slight differences in the proportion married. The Films Alone treatment type showed 82.4 per cent of its participants married, which was the highest percentage married of all treatment types. The control group showed 60.0 per cent participants married, which was the lowest percentage of any treatment type. Although the percentages of the total sample who were married appear somewhat high, a rather high proportion in each treatment type was single. This appears reasonable, since any program of this kind would likely have an unusual attraction for single individuals because of the time factor and other factors involving intellectualism and social appeal.

The Books Alone treatment type had the highest proportion of participants who were college graduates--90.5 per cent. The treatment type involving Films Alone showed that 29.4 per cent of the participants were college graduates--the lowest proportion for any treatment type. A relatively high proportion in all other treatment types were college graduates, a fact probably accounted for primarily by the intellectual appeal of the program. The rather low proportion of college graduates in the Films Alone treatment type can probably best be explained with reference to sex and age and by the fact that films seem to have entertainment appeal regardless of their other types of appeal.

In four of the treatment types, less than 50 per cent of the participants had lived in the community less than 10 years. These were the Full Treatment, the Films Alone, the Books and Films, and the Books and Discussion treatment types. In the Films and Discussion, the Films Alone, and the Control group treatment types, over 50.0 per cent of the participants had lived in the community less than 10 years.

Table 5. Percentage Distribution of Selected Variables and Types of Treatment for the Sample

Treatment Type	Selected Variables						
	Females	45 Years and Over	Married	College Graduates	Under 10 Years Residence	Income less than $9,999	Occupations Other than Professional, Semi-Professional, Executive, or Business
	%	%	%	%	%	%	%
Full Treatment	59.5	50.8	75.4	74.7	32.5	46.1	36.5
Books and Films	60.6	42.4	75.8	66.7	45.5	60.6	30.2
Books Alone	38.1	28.6	76.2	90.5	66.6	47.6	9.5
Films Alone	70.6	35.2	82.4	29.4	35.2	70.6	88.3
Films and Discussion	73.3	52.4	73.8	49.2	54.0	62.3	68.9
Books and Discussion	76.7	55.8	62.8	88.3	46.5	67.4	4.6
Control	27.3	58.2	60.0	81.8	69.2	63.6	41.8

Income was dichotomized into categories for respondents with yearly incomes of less than 9,999 dollars, and those whose yearly income was over 10,000 dollars. For those respondents experiencing the Full Treatment, 46.1 per cent, or nearly one-half, had yearly incomes of less than 9,999 dollars. The only other treatment type with less than one-half of its respondents (47.6 per cent) indicating a yearly income of 9,999 dollars or less was the Books Alone treatment type. All of the other treatment types had from 60.6 per cent as the lowest proportion to 70.6 per cent as the highest proportion with incomes under 9,999 dollars.

Occupation is dichotomized on the basis of those in professional, semiprofessional, executive, or business occupations, and those in other types of occupations. In the treatment type involving Films Alone, 88.3 per cent were in occupations other than the types listed. The lowest per cent of respondents in this same category (4.6 per cent) was in the treatment type experiencing Books and Films. An explanation for the wide discrepancy in occupation is that the respondents for these treatment types were recruited from communities and organizations and were selective on the basis of other variables such as age, sex, and education.

In summary, it appears that the respondents in the sample vary with reference to treatment type and social-environmental and other background variables. They also vary with reference to treatment type and rate of attrition. The respondent in this sample is generally older, is more likely to be married, is mobile, and generally is a college graduate.

A relationship between treatment type and rate of attrition in the sample does exist, and the implications must be taken into account in further analyses.

PART IV TYPE OF TREATMENT AND EFFECTS OF COMMUNICATION MEDIA

THE relationship between treatment type and the effects of communication media on attitudes, beliefs, and activities relating to "basic issues" will be the subject of this chapter.

The type of treatment is based on the combinations of informational resources and educational situations to be evaluated. Treatment types will be classified as: full treatment, films and discussions, books alone, films alone, books and films, and books and discussion. These combinations constitute the six treatment types to be compared.

The dimension of change in attitudes, values, and beliefs, as it is related to the objectives of the program, form the dependent variables for this study.

There are specifically five indexes distinguishing attitudinal change among the respondents in the sample. As described in Part III, these are:

1. Educational Preference Index
2. Authoritarianism-Dogmatism Index
3. Fundamentalism-Liberalism Index
4. Cultural Relativity Index
5. Basic Group Orientation Index

The measurement of contingency to be employed in establishing the existence of relationship is the Chi-square formulation.* Other relevant measures of differences were not appliable because of some irregularities in the data.

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*The use of the contingency measure in this instance involves a binomial composite hypothesis, which in the null form is that there is no change from time 1 to time 2 across all treatments. This involves the use of "one-sided" Chi-squares since we are interested only in whether or not the treatment increases the proportion of "high" from time 1 to time 2. Our alternative hypothesis then is that there is change. If the calculated Chi-square is greater than the tabular Chi-square with 5 degrees of freedom, then Chi-square is significant at the 5 per cent level. We are testing the goodness of fit, using proportions rather than frequencies, because we have irregularities in treatment from frequency to frequency. These irregularities involve the assumption of independence.

Data concerning the hypotheses drawn from the theoretical discussion presented in Chapter II may now be examined.

> Hypothesis 1a: There will be a positive change in educational preference with exposure to the content materials of the program.
>
> Hypothesis 1b: Change in attitudes specifying educational preferences will vary with the nature of the informational resources and the educational situation (treatment type).

Table 6 shows treatment type and educational preference for the pre-test and the post-test samples. The type of treatment is based upon the criteria of informational resources and educational situations as defined in Chapter III. Since the study design is "longitudinal" in nature, the post-test sample is composed of those respondents in the pre-test sample who completed the program.

Generally, there appears to be little evidence of change in educational preference after exposure to the content materials of the program. The Full Treatment type, which is composed of the content materials of books and films and the educational situation of discussion in groups affords a reasonable illustration of this point. This treatment type will be used to examine hypothesis 1a and other similar hypotheses concerning attitudinal change since it includes the largest number of content materials and educational situations of all of the types of treatment in the study design.

For the total number of respondents in the pre-test sample who experienced the Full Treatment, 65 respondents had scores that were classified as high, and this was indicative of no preference for specified types of educational programs. Thus, 51.6 per cent, or approximately one-half, of the respondents in the pre-test sample evidenced little or no preference for varying types of education programs. Of the total number of respondents in the post-test sample who experienced this same type of treatment, 69 or 54.8 per cent had scores that were indicative of no preference for specified types of educational programs.*

On the basis of these observed percentages, there is little evidence to suggest that there was a significant change in educational preference with exposure to the content materials of the program. The hypothesis cannot be accepted on the basis of these data, and by inference, further tests of significance are not prescribed. A plausible explanation exists in that many respondents probably had well-structured and specific reasons for participating in this particular educational program but were not interested in other related and general educational endeavors. It is also likely that some situational, participational, and interactional aspects of the program had appeal to some participants and that these participants were drawn to the program. The implication is that

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*The mean scores of respondents in the pre-test and post-test samples were not significantly different. Upon inspection of these, further tests of differences were not deemed necessary.

Table 6. Type of Treatment and Educational Preference for Pre-test and Post-test Respondents in the Sample

	Educational Preference							
	High				Mean		Total	
Treatment	Pre-test		Post-test		Pre-test	Post-test		
Type	No.	%	No.	%	$\bar{X}$	$\bar{X}$	No.	%
Full Treatment	65	51.6	69	54.8	16.2	15.9	126	100%
Books and Films	16	48.5	14	42.4	16.8	14.1	33	100%
Books Alone	10	47.6	10	47.6	17.9	14.7	21	100%
Films Alone	4	23.5	7	41.2	13.2	13.4	17	100%
Films and Discussion	32	52.5	30	49.2	16.4	15.9	61	100%
Books and Discussion	23	53.5	21	48.8	14.8	13.1	43	100%

$X^2 = 14.918$ p .05 with 5 D. F.

individuals probably participate in many types of organized activities and programs for reasons that are not always consistent with the stated objectives of the particular program. In effect this specifies the particular interest in a program and similarly related programs.

When the different treatment types are compared with reference to change in educational preferences, there is little evidence of change on the basis of the type of treatment. When Chi-square was computed, the existence of an association between the two variables was suggested. Chi-square was significant at the .05 level. Although the two variables are related and the data do in fact support the hypothesis, the relationship exists primarily on the basis of one treatment type. By inspection of the original computations and those from Table 6, the only treatment type indicative of change in educational preference after exposure is the treatment type involving Films Alone. In this treatment type, 23.5 per cent or approximately one-fourth of the respondents in the total pre-test sample had index scores indicative of no preference; whereas 41.2 per cent, or close to one-half, of the respondents in the total post-test sample had scores indicative of a change in educational preferences after exposure to the content materials of the program. This treatment type (Films Alone) by itself accounts for the significance of the contingency measure. All of the remaining treatments give relatively little (in one instance, no) indication of change after exposure to the content material. The data generally support the hypothetical statement that change in educational preferences varies with the nature of the educational situation and informational resources involved. However, the obviously small size of the sample for the treatment type involving Films Alone should be mentioned. With samples of this size, small numerical differences often give indications of disproportionate change. Even with this conditioning factor, it can be assumed that the treatment type involving Films Alone is more salient than the other existing types of treatment in inducing attitudinal change in preferences for types of educational programs. It can be assumed that the effect of films is overshadowed and negated by the other content material and educational situations in other treatments where films appear in combination with these educational media.

> Hypothesis 2a: There will be a positive change in attitudes expressing authoritarianism-dogmatism with exposure to the content materials of the program.

> Hypothesis 2b: Change in attitudes expressing authoritatianism-dogmatism will vary with the nature of the informational resources and the educational situation (treatment type).

The Authoritarianism-Dogmatism Index used for the measurement of conformity in recognizing and accepting problem issues presents a series of items conceptually and theoretically related to authoritarianism and dogmatism. Both of these types represent personality and ideational systems of conformity that specify the appreciation, acceptance, and cognizance of basic problems and issues. The assumption is that those respondents who are classified as authoritarian or dogmatic by this measure will be less appreciative, receptive, and cognizant of problem issues than those in the sample who are not classified. A related assumption is that change in attitudes expressing authoritarianism-dogmatism will occur as a result of exposure to the content materials of the program. Hypothetically, this change would be from "authoritarian" to "liberal" systems of conformity to change.

Table 7 shows treatment type and suthoritarianism-dogmatism for the pre-test and post-test samples. Of the respondents in the pre-test sample who participated in the treatment type involving all of the educational resources, i.e., the Full Treatment, 65.1 per cent, or nearly two-thirds, had scores classified as high on the Authoritarianism-Dogmatism measure. In the post-test sample, 62.7 per cent (approximately the same proportion) had scores classified as high. Thus, the proportion of respondents who were classified as high on authoritarianism and dogmatism by this measure did not change significantly after exposure to the content materials of the program. When the mean scores of the total pre-test and post-test samples are compared for this measure, the differences between the two are not significant. The mean score of the pre-test sample is 22.4 while the mean score of the post-test sample is 22.2.

After inspection of the date in Table 7 relating to the Full Treatment type, there is little evidence to suggest that there is a change in attitudes manifesting authoritarianism-dogmatism after exposure to the informational resources and educational situations involved in the program. On the basis of these data, further tests of significance are uncalled for and the hypothesis cannot be accepted. The data suggest the possibility that people with high dogmatism were probably attracted to the program. The percentage of respondents with high dogmatism appears to be greater than in the general population although no substantiating evidence exists.

Table 7. Type of Treatment and Authoritarianism-Dogmatism for Pre-test and Post-test Samples

	Authoritarianism - Dogmatism							
	High				Mean		Total	
Treatment	Pre-test		Post-test		Pre-test	Post-test		
Type	No.	%	No.	%	$\bar{X}$	$\bar{X}$	No.	%
Full Treatment	82	65.1	79	62.7	22.4	22.2	126	100%
Books and Films	11	33.3	15	45.5	19.1	19.3	33	100%
Books Alone	12	57.1	8	38.1	22.6	19.9	21	100%
Films Alone	3	17.6	3	17.6	15.8	16.2	17	100%
Films and Discussion	24	39.3	28	45.9	20.1	20.3	61	100%
Books and Discussion	20	46.5	18	41.9	20.1	19.6	43	100%

$X^2 = 15.444$ p .05 with 5 D. F.

The date in Table 7 showing comparisons between the treatment types have direct bearing on the hypothetical assumption that change in authoritarian and dogmatic attitudes varies with the type of treatment involved. Two of the six treatment types indicate some degree of change in authoritatian-dogmatic attitudes with exposure to the content materials of the program. For those respondents in the treatment type utilizing Books Alone 57.1 per cent, or over one-half, of the pre-test sample had scores indicative of high authoritarian and dogmatic attitudinal orientations. Only 38.1 per cent, or slightly over one-third, of those respondents in the post-test sample evidenced high authoritarian and dogmatic attitudes. Although the small size of the sample in this treatment type could be a conditioning factor in the relationship, a difference of considerable magnitude does exist after exposure to the treatment. One explanation for the salience of this treatment type is that those individuals who evidence greater degrees of authoritarianism and dogmatism and are in fact less receptive to or cognizant of new and extraneous issues will tend to accept authority and dogmatic ideas when legitimized and presented in an authoritative and documented manner such as appears in published manuscripts and/or pamphlets or books. Other informational resources such as films, or the expressed ideas of others, may not appear as legitimate or authoritative as books or any published material in changing attitudes that are authoritarian and dogmatic in nature. If this is the case, the other treatment types in which books are included negate the effects of books by the inclusion of other sources of information that confuse or outweigh the effects of the Books Alone treatment.

The second of the treatment types that produce an element of change is the type including Books and Films. Of the total respondents experiencing this combination of informational resources 33.3 per cent, or exactly one-third, have pre-test scores indicative of high authoritarian and dogmatic attitudinal orientations. After exposure to the educational resources in this treatment type, 45.5 per cent, or almost one-half of the respondents, have scores that indicate a high authoritarian and dogmatic orientation. In this instance change is evident, but inspection of the data in Table 2 shows that the direction of the change is opposite.

The Books and Films treatment type, then, varies in its effect upon change in attitudes in that it produces a greater degree of change than four other types of treatment, although the direction of the change is not consistent. One explanation is that the rather artful and cosmopolitan nature of the film series produces an "overpowering" or even "closure" type of effect, and some respondents who are not authoritarian or dogmatic tend to become so as a result of over-reaction to the film. The effect produced, in essence, tends to overshadow and blank out the effects of the books.

Chi-square is significant at the .05 level and the existence of an association is suggested. Again, as in the case of hypothesis 1b, two of the treatment types account almost entirely for the significance of the association. In one of these (Books and Films), the expected direction of relationship was not completely upheld by the data.

These data generally support the hypothesis that change in basic attitudes related to authoritarianism-dogmatism varies with the combination of informational resources and educational situation (treatment type). The hypothesis can be accepted, and this can be explained on the basis of the comparatively large proportion of respondents in the two treatment types discussed who evidence a change in attitudes after exposure to the content materials of the particular treatment types.

Hypothesis 3a: There will be a positive change in attitudes expressing fundamentalism-liberalism with exposure to the content materials of the program.

Hypothesis 3b: Change in attitudes expressing fundamentalism-liberalism will vary with the nature of the informational resources and the educational situation (treatment type).

Table 8 shows the relationship between treatment type and attitudes expressing fundamentalism as an attitudinal orientation for the pre-test and post-test samples. The Fundamentalism-Liberalism Index was designed to measure attitudes expressing a fundamentalist attitudinal orientation or a liberal orientation to basic problem issues. Like the Authoritarianism-Dogmatism Index, it was designed to measure the conformity dimension relating to the appreciation, acceptance, and cognizance of problem issues.

In general, Table 8 shows little evidence of a change in attitudes of fundamentalism with exposure to the content materials of the program. In the treatment type involving all of the informational resources and the educational situation of group participation and discussion, the exact same proportion of the total sample had scores indicative of fundamentalist attitude orientation after exposure to the content materials of the program. Of those respondents in the

Table 8. Type of Treatment and Fundamentalism-Liberalism for Pre-test and Post-test Samples

Treatment	Fundamentalism - Liberalism							
	High				Mean		Total	
	Pre-test		Post-test		Pre-test	Post-test		
Type	No.	%	No.	%	$\bar{X}$	$\bar{X}$	No.	%
Full Treatment	54	42.9	54	42.9	43.4	42.8	126	100%
Books and Films	20	60.6	20	60.6	44.1	45.4	33	100%
Books Alone	9	42.9	13	61.9	44.0	44.9	21	100%
Films Alone	12	70.6	10	58.8	46.9	46.1	17	100%
Films and Discussion	26	42.6	25	41.0	43.3	43.0	61	100%
Books and Discussion	27	62.8	29	67.4	46.3	45.8	43	100%

$X^2 = 10.878$ $p < .05$ with 5 D. F.

total pre-test sample, 42.9 per cent, or nearly one-half, expressed attitudes indicative of fundamentalist orientation, and of the total in the post-test sample, 42.9 per cent, or the same proportion, evidenced scores indicative of fundamentalist-type orientation.

Inspection of the mean scores of the total respondents in this treatment type offers little or no evidence of a significant difference in attitudinal change after exposure to the content materials. The mean score of the pre-test sample was calculated as 43.4, and the mean score of the post-test sample was 42.8. After inspection of other mean scores for the pre- and post-test samples in other treatment types, there is still no evidence to suggest significant changes in attitude with exposure to the content materials.

The hypothesis is not acceptable in that the data do not verify the assumption that attitudes expressing fundamentalist orientations are changed with exposure to the content materials. One explanation for the failure of the program to reach this dimension of conformity is that some attitudinal orientations take longer in their formation, assume greater priority, and are less subject to change. It is entirely plausible that this attitudinal dimension is of such a nature.

The data in Table 8 do not support the hypothesis that change in fundamentalist attitudinal orientation will vary with the type of treatment involved.

Chi-square, when computed, was not significant at the .05 level for the variables of treatment type and fundamentalism-liberalism. Again, the hypothesis is not strongly supported, but inspection of the data suggests that some treatments result in more change than others. In two of the treatment types, i.e., Full Treatment and Books and Films, there is no indication of change among the respondents after exposure. In these two treatment types, 42.9 per cent and 60.6 per cent, respectively, evidence high fundamentalistic attitudes both before and after exposure. One other treatment type (Films and Discussion) gave very little evidence of change after exposure. In this type, 42.6 per cent of the respondents were classified as fundamentalistic before exposure and 41.0 per cent were so classified after exposure to the media in the treatment.

The treatment types of Books Alone, Films Alone, and Books and Discussion did give some indication of change after exposure, but not of a significant degree.

On the basis of these data, hypothesis 3b cannot be accepted.

Hypothesis 4a: There will be a positive change in attitudes expressing cultural relativity with exposure to the content materials of the program.

Hypothesis 4b: Change in attitudes expressing cultural relativity will vary with the nature of the informational resources and the educational situation (treatment type).

The Cultural Relativity Index is a measure of the absoluteness of beliefs and is intended as another specification of conformity relating to the appreciation, acceptance, and cognizance of problem issues. The measure was designed to differentiate between those who are able to accept the beliefs of others without placing their own beliefs above the beliefs of others and those who hold their own beliefs as absolute above beliefs of others. The cultural relativity measure is weighted and scored in such a manner that those whose scores are classified as "high" would exhibit the attitude that beliefs are absolutes.

As shown in Table 9, there appears to be no significant difference in cultural relativity after exposure to the full combination of informational resources of the program. After exposure to the educational resources, 57.1 per cent, or over one-half, still possessed attitudes that were indicative of beliefs as absolutes for cultural relativity. Of the respondents in the pre-test sample, 60.3 per cent, or generally the same proportion, had expressed this same type of orientation concerning cultural relativity. The mean scores of those respondents in the pre-test sample who experienced the Full Treatment was 10.4, while the mean score of the respondents in the post-test sample was 10.1. The difference between the two means appears to be of little consequence, and no further tests of significance are prescribed.

Again, the hypothesis is not strongly supported, as shown by the lack of significant differences between the mean scores of the pre-test and post-test samples and by the lack of evidence of change in attitudes after exposure to informational resources and educational situations.

One explanation that could be offered is that the very nature of the educational situation and resources involved in this treatment type tends to reinforce absolutes that do exist and possibly perpetuate the tendency to accept

Table 9. Type of Treatment and Cultural Relativity for Pre-test and Post-test Samples

	Cultural Relativity							
	High				Mean		Total	
Treatment	Pre-test		Post-test		Pre-test	Post-test		
Type	No.	%	No.	%	$\bar{X}$	$\bar{X}$	No.	%
Full Treatment	76	60.3	72	57.1	10.4	10.1	126	100%
Books and Films	15	45.5	14	42.4	9.5	9.5	33	100%
Books Alone	12	57.1	9	42.9	10.2	9.4	21	100%
Films Alone	3	17.6	2	11.8	8.2	7.9	17	100%
Films and Discussion	26	42.6	31	50.8	9.1	9.9	61	100%
Books and Discussion	28	65.1	23	53.5	10.6	9.5	43	100%

$X^2 = 9.468$ p .05 with 5 D. F.

beliefs of others if this attitudinal perspective existed.

The hypothesis that change in attitudes centered around cultural relativity will vary with the nature and type of treatment is not supported by the data in Table 9. All treatment types do appear to generate some change, but the magnitude of change is inconsequential and the direction of change is inconsistent. The greatest degree of change appears to occur in Books Alone, where 57.1 per cent, or over one-half, of the respondents in the pre-test sample have scores classified as high or indicative of holding beliefs as absolutes. Only 42.9 per cent, or considerably more than one-third, evidenced high scores after exposure to the content materials of this treatment type.

The treatment type involving Books Alone appeared to be the most salient of all the types in inducing change in authoritarian and dogmatic attitude orientation. This type is more salient than other treatment types in changing attitudes that tend to hold beliefs as absolutes, and probably for the same reason, i.e., that books are the most authoritative and legitimate sources of information available. Other treatment types in which books are included along with other media are not associated with change because the effects of these media confuse or overshadow the effect of books.

Chi-square was not significant at the .05 level for these variables and no association was evident. An examination of mean scores yields little evidence of variation by types of treatment.

The hypothesis is not accepted, but upon examination of the data there is some slight indication that at least one type of treatment (Books Alone) does tend to initiate change with respect to the attitudes involving cultural relativity.

Hypothesis 5a: There will be a positive change in attitudes expressing basic group orientation with exposure to the content materials of the program.

Hypothesis 5b: Change in attitudes expressing basic group orientation will vary with the nature of the educational resources and the educational situation (treatment type).

Table 10. Type of Treatment and Basic Group Orientation for Pre-test and Post-test Samples

	Basic Group Orientation							
	High				Mean		Total	
Treatment	Pre-test		Post-test		Pre-test	Post-test		
Type	No.	%	No.	%	$\overline{X}$	$\overline{X}$	No.	%
Full Treatment	48	38.1	50	39.7	6.6	6.4	126	100%
Books and Films	20	60.6	21	63.6	7.6	7.3	33	100%
Books Alone	9	42.9	10	47.6	6.3	6.1	21	100%
Films Alone	9	52.9	8	47.1	7.8	7.1	17	100%
Films and Discussion	26	42.6	37	60.7	7.1	7.5	61	100%
Books and Discussion	27	62.8	25	58.1	7.2	6.9	43	100%

$X^2 = 9.409$ p .05 with 5 D. F.

Table 10 shows the relationship between the treatment type and basic group orientations for the pre-test and post-test samples. As shown in Table 10, there appear to be no significant differences in basic group orientation after exposure to the informational resources and educational situation in the program.

For those respondents experiencing the Full Treatment, 38.1 per cent, or over one-third of the pre-test sample, were classified as high; these respondents can be construed as being passive with reference to basic group orientation. Approximately 39.7 per cent, or about the same proportion, of the sample was classified as high on this measure after exposure to the content materials. An inspection of the mean scores of the pre-test and post-test sample reveals a mean score of 6.6 for all respondents in the pre-test sample and a mean score of 6.4 for all respondents in the post-test sample. The existence of a significant difference between the two samples, after exposure to the content materials of the program, is not shown by these data.

Hypothesis 5a is not acceptable in that the data do not verify the notion that there will be a positive change in basic group orientation after exposure to the content materials.

Generally, the data do not support the corresponding hypothesis that changes in basic group orientation will vary with the nature of the informational resources and educational situation. Chi-square for the variables of treatment type and basic group orientation was 9.409 and was not significant at the .05 level of significance.

Therefore, the hypothesis as stated cannot be accepted, as it appears that most treatment types produce little, if any, change in attitudes concerning basic group orientation. The one treatment type that gave a slight indication of producing change was the type which utilized Films and Discussion. In this treatment type, 42.6 per cent, or nearly one-half, of the respondents in the pre-test sample had scores that were indicative of passivity with reference to basic group orientation, and 60.7 per cent, or close to two-thirds, of the respondents in the post-test sample had scores that were indicative of the same nature. In this instance, the direction of the association is unexpected, but this indication of change could result from the continued effect of the Films and Discussion treatment, which produced more passivity than activity in channeling information about basic beliefs.

In summary, the data have not indicated a significant relationship between exposure to the content materials of the Adult Liberal Studies Program (Basic Issues of Man) and changes in attitudes conceptually related to the subject, intent, and purpose of the program. There is some evidence of a relationship between the type of treatment (constituted by combinations of informational resources and educational situations) and changes in attitudinal orientation, although the existence and direction of the relationship are not clear in all cases. In some instances, there is evidence that certain types of treatment produce a change with exposure, but not in the expected direction.

Chi-squares were significant when computed for treatment types and changes in attitudinal orientation expressing educational preferences and authoritarianism-dogmatism. After exposure to the content materials of the program, the degree of change in these two variables was significant but appeared to exist mainly on the basis of one or two treatment types. There was little evidence, or inconsistent evidence, to suggest changes in attitudes by the varying treatment types for the measures of fundamentalism-liberalism, cultural relativity, or basic group orientation.

Some of the observed relationships are suggestive in that they indicate slight differences among these variables. Some apparently show no relationships or even indicate the opposite from the expected one. Generally, it appears that of all the content materials books had the greatest effect on attitudes. Possibly they were more carefully prepared, but probably they were of a more authoritative nature. It will be the purpose of the following chapter to examine other variables that would intervene or possibly condition these observed relationships.

PART V INTRODUCTION OF VARIABLES

IN PART IV the relationship was examined between exposure to the content materials included in the Basic Issues of Man program and changes in attitudes centered around problem issues. The relationship between the type of treatment and its effect on attitudes was also examined. In most instances, the relationship between these variables was either nonexistent, slight, or inverse with reference to the hypothesized relationships. However, Chi-squares were significant when computed for two of the variables.

In the remaining analytical sections of this study, prime emphasis will be placed upon variables that would appear to control or condition the observed relationships between the type of treatment and the effects of the content materials and the educational situation. A number of approaches could be utilized in examining the effects of these control variables. An ideal approach would entail the use of the control variables in tables where the treatment type is held constant and the variables are assessed with respect to their effects upon the relationship between treatment types and the effects of the communication media. By this method, when the effect of the controls is weighed, the specification of the relationship can be made. All of the control variables would be utilized in the same manner with this approach.

Straightforward as this approach may appear, it is not suitable for these data insofar as the total sample size is not large enough with the existing number of sample units to insure cell frequencies of meaningful size.

Since the small size of the sample would cause the cell frequencies to be somewhat meaningless, and since the observed relationships between types of treatment and effects of communication media were nonexistent, low, or inverse, the most expedient use of the control variables is to view them as independent variables (or as independent and control variables). In order to establish the saliency and relationship (if any exist) of each of the control variables to the dependent variable, each of the control variables will be treated as independent variables, and it can then be specified which of the variables should be of most import in explaining the original relationships between treatment type and the effects of communication media on attitudes.

In this section of the study, primary concern will be with establishing which control variables will be most important in offering added explanation to the relationship between exposure to content materials and attitudinal change and between type of treatment and attitudinal change.

CONTROL VARIABLES

The variables that will be considered as control variables have been selected on the basis of their import for other related studies and their logical usefulness in this study. These control variables are:

(1) Age - The age of the respondent should be related to the effects of communication media since it is with age and experience that attitudes, beliefs,

and interaction patterns are specified, formulated, and integrated.[16] If the cognizance of, appreciation of, and receptivity to issues confronting man are related to kinds of learning situations and resources, then age should be of import in the selectivity process.

(2) Residence - Residence (rural farm, rural nonfarm, and urban) is one other variable that could specify or condition changes in attitude. By residence within the neighborhood and community, many aspects of an individual's perceptual and attitudinal orientation are formulated, reinforced, and perpetuated. The assumption is that those who reside in certain types of general areas have integrated patterms of acceptance and conformity to issues by being exposed to normative patterns that exist by type of residence.[17] The association between residence and the acceptance of change in many attitudinal areas is well established and could be of import for this study.

(3) Sex - Adult educational programs have been highly selective for females in the past, and to some degree currently are selective in the same manner. The existing literature tends to imply attitudes and orientation descriptive of the female participant.[18] As more males become eligible for adult educational programs because of increased numbers of retired individuals, more free time made possible by increased industrialization and automation, increased numbers of retired and elderly people whose interests often center around less physical pursuits, and because of increased interest in adult education programs generally, it is likely that some aspects of attitudinal change will be selective on the basis of the sex of the respondent.

(4) Marital Status - Many aspects of change in attitudes centered around the cognizance and acceptance of problem issues appear to be based upon the stereotype of individuals as "old maidish" or "bachelor," or generally the state of being unmarried. Also, many other individual attitudes are assumed to

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16. John B. Miner, Adult Intelligence (New York: Springer Publishing Company, 1957), pp. 86-90; C. Taylor, "Age Differences in Rigidity as Revealed in Attitude Scale Responses" (Unpublished Ph.D. dissertation, Syracuse University, Syracuse, New York, 1955); Irving Lorge, "Thurstone Attitudes Scale: II, The Reliability and Consistency of Younger and Older Intellectual Peers," Journal of Social Psychology, May 1939.

17. W. H. Key, "Rural-Urban Differences in Social Participation" (Unpublished Ph.D. dissertation, Washington University, St. Louis, 1953); H. F. Kaufman, Participation in Organized Activities in Selected Kentucky Localities, Bulletin 528, University of Kentucky Agricultural Experiment Station, Lexington, 1949; W. A. Anderson, Social Participation of Rural Nonfarm Adults, Bulletin 928, Cornell University Agricultural Experiment Station, Ithaca, New York, 1950.

18. M. Axelrod, "A Study of Formal and Informal Group Participation in a Large Urban Community" (Unpublished Ph.D. dissertation, University of Michigan, Ann Arbor, 1954); W. Bell and M. Force, "Urban Neighborhood Types and Participation in Formal Associations," American Sociological Review, XXI, February 1956.

exist on the basis of marriage.[19] If differences on the basis of marital status can be assumed to exist, it would appear worthwhile to examine this variable to see if it bears any relationship to the various aspects of attitudinal change pertinent to this study.

(5) Education - Levels of education for the individual constitute a type of variable that could possibly condition and orient attitudinal change concerning problem issues. Since specific attitudes and participational behavior can be evidenced in differing educational groups, it would appear that educational levels are related to change in attitudes concerning problem issues.[20] The educational variables will be examined in view of any explanatory relationships that might be in evidence.

(6) Occupation - The relationship between occupation and the cognizance and acceptance of problem issues will be examined for all aspects of attitudinal change. Occupation is probably related to change for many of the same reasons and in much the same manner as education.[21]

(7) Income - Levels of income are probably related to attitudinal change in much the same manner and for many of the same reasons as education and occupation. Income levels specify access to ideas involving change and specify associations by propinquity to others of similar incomes. Income prescribes a style of life, and life styles in turn prescribe associations, access to ideas, reinforcement of ideas, and evaluations of their worth and utility.[22]

Analysis of Control Variables

All of the variables discussed in this section were tested using Chi-square as a measure of the existence of relationship. Tables showing these variables are given in Appendix B. In general terms, there is scant evidence to suggest a relationship between changes in attitudinal orientations relating to problem issues and the control variables that are under consideration. Specifically, only two of the control variables appear to have bearing on attitudinal change.

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[19] Richard Dewey and W. J. Humber, An Introduction to Social Psychology (New York: The Macmillan Company, 1966), p. 129.

[20] R. Pintner, "A Comparison of Interests, Abilities and Attitudes," Journal of Abnormal and Social Psychology, XXVII, 1933; S. Stouffer, Communism, Conformity and Civil Liberties (Garden City, New York: Doubleday and Company, 1955); Christie and Jahoda (eds.) op. cit.

[21] F. Dodson, "Patterns of Voluntary Association Among Urban Working Class Families," American Sociological Review, XVI, October 1951.

[22] Eugene A. Wilkening, The Acceptance of Certain Agricultural Programs and Practices in a Piedmont Community (Ph.D. dissertation, University of Chicago, 1949); also summarized as The Acceptance of Improved Agricultural Programs in a Piedmont Community, Raleigh, North Carolina, Agricultural Experiment Station, 1949; W. Bell and M. Boat, "Urban Neighborhoods and Informal Social Relationships," American Journal of Sociology, LXII, January 1957

A relationship between residence and change in attitudes is indicated for four of the five dimensions of attitude relating to the cognizance and acceptance of problem issues. By inspection of the data, it appears that a larger proportion of participants having rural and rural-nonfarm residence evidence attitudinal change after exposure to the content materials than do participants who live in urban areas.

Income as a control variable was indicative of some change in all attitudinal dimensions except educational preference. Generally, lower income prescribed change to a greater degree than the other categories of income when income was considered as a control variable. Although evidence of a significant relationship is slight, the variable possibly shows a trend. The total effect of this variable is difficult to assess because of the contradictory nature of some relationships and the comparatively small magnitude of the change.

An indication of change is slight for some attitudinal dimensions when related to residence and income, but the fact that some small change occurred after exposure should not be overlooked.

The size of the sample in some residence and income categories is possibly a conditioning factor in indications of an existing relationship. Any inferences concerning the significance of these variables are conditioned by the size of the sample in the categories under consideration.

Tables showing these and other variables will not be discussed in this section, but will be presented in appendix form.* Since all of the control variables produced no evidence of significant changes in the relationship after they were introduced, a presentation and discussion would be relatively fruitless and would offer little added information.

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* Appendix B.

PART VI SUMMARY AND CONCLUSIONS AND IMPLICATIONS FOR FUTURE RESEARCH

THE purpose of this chapter is to present a logical summary of the findings of the study, to indicate the manner in which the data have supported the hypotheses, and to specify existing and future implications for educational programs with similar purposes and aims.

Rather than supplying reliable answers from which conclusions may be drawn, the data presented in this study pose many questions of a theoretical and methodological nature. Moreover, because of the very nature of the subject and of some inherent difficulties in the research design, conclusions are tentative and implications will of necessity be based on negative results. Apparently there are no panaceas. The conclusions to be drawn will represent a range of probable answers, and suggestions to be made will specify directions for future educational programs and research concerning them. Conclusions of such a nature will give less than immediate answers to those concerned with promoting ideas and change through educational endeavors, but should be of utility in avoiding future pitfalls.

Of the two general hypotheses guiding this study, the first is that "the effectiveness of the content materials included in the Adult Liberal Studies Program will be evidenced by attitudinal changes relating to the acceptance, cognizance, and channelization of problem issues." The second general hypothesis is that "the types of learning, as measured by attitudinal change, in this liberal studies program will vary with the combination of informational resources and educational situation /or the treatment type/." Through examination of these hypotheses, as they were related to the evaluation objectives, it was anticipated that some specification of the relativity, suitability, and efficiency of the various media, along with other effects of the educational situation, could be made. It was also anticipated that another function of the evaluation would be to examine the process of interaction and its relationship to the success of the program as well as the joint effects of interaction and its relationship to the educational and informational resources.

It should be noted that all of the hypotheses predicted the existence of a relationship among two variables. The first of each set of hypotheses also predicted the direction of relationship among two variables. The existence of a relationship was found for two hypotheses when tested using Chi-square, but the direction of relationship was either nonexistent or contradictory to that predicted. Moreover, when additional variables were introduced as controls, they were not found to condition or to specify the existence of a relationship. The unexpected negative results obtained therefore even after controls were applied. A logical endeavor, then, is to examine the specific hypotheses, and in this manner try to account for the negative results that exist.

Table 11 shows each hypothesis and the salient aspects of each hypothesis. The table is shown as a means of illustrating that the existence of relationship generally was not evident, and that the prediction of the hypothesized direction of relationship was not upheld. Specifically, the hypotheses, when examined by treatment type and attitudinal change concerning problem issues, are as follows.

Educational Preference

Hypothesis 1a, that "there will be a positive change in educational preference with exposure to the content materials of the program," is not supported by the data. There is a slight indication from the data that the direction of the relationship is contrary to that hypothesized.

Hypothesis 1b, that "change in attitudes specifying educational preferences will vary with the nature of the informational resources and the educational situation," is supported by the data. Inspection of the data reveals that two treatment types (Films Alone and Books Alone) are more indicative of attitudinal change. This type of treatment accounts primarily for the significance of the contingency measure. When age, residence, sex, marital status, education, occupation, and income are introduced as control variables relative to educational preference, there is little evidence to suggest a significant change in attitudes by exposure or by the varying types of treatment. There are slight indications that two of the variables, residence and income, can have a conditioning effect, but these are interpreted trends rather than significant differences.

Table 11. The Salient Aspects of Hypotheses

Hypothesis	Change after Exposure to Content Materials		Change Relative to Treatment Type
	Existence of Relationship	Direction Predicted	Existence of Relationship*
1. Educational Preference	No	No	Yes
2. Authoritarianism-Dogmatism	No	No (weak)	Yes
3. Fundamentalism-Liberalism	No	No	No
4. Cultural Relativity	No	No (weak)	No
5. Basic Group Orientation	No	No	No

*Significant Chi-squares

Authoritarianism-Dogmatism

Hypothesis 2a, that "there will be a positive change in attitudes expressing authoritarianism-dogmatism with exposure to the content materials of the program," is not supported by the data, and the existence of a relationship is not evident.

Hypothesis 2b, that "change in attitudes expressing authoritarianism-dogmatism will vary with the treatment type" involved, is supported by the data, and there is evidence to suggest the existence of a relationship. Two of the six treatment types, Books Alone and Books and Films, give evidence of change with exposure to the combination of materials and situations included in their treatments.

When age, residence, sex, marital status, education, occupation, and income are introduced as control variables, the relationship is not clarified. Marital status appears to be more highly related to changes in attitudes expressing higher authoritarian-dogmatic orientations. However, there appears to be no systematic patterning when these variables are introduced.

Fundamentalism-Liberalism

The third set of hypotheses, that "there will be a positive change in attitudes expressing fundamentatlism-liberalism with exposure to the content materials of the program" and that "change in attitudes expressing fundamentalism-liberalism will vary with the...treatment type," is not supported by the data. There is also very little evidence to suggest an existing relationship when the control variables are introduced. By inspection, there is slight evidence that income conditions the relationship, but it is not of a magnitude that would indicate acceptance of the hypothesis.

Cultural Relativity

Hypothesis 4a, that "there will be a positive change in attitudes expressing cultural relativity with exposure to the content materials of the program," is not supported by the data. There is little evidence of a significant difference after exposure to the content materials of the program.

Hypothesis 4b is that "change in attitudes expressing cultural relativity will vary with the...treatment type." The data do not verify the hypothetical notion that attitudinal changes vary with the type of treatment. The control variables, when introduced, gave little added insight in clarifying the relationship.

Basic Group Orientation

Hypotheses 5a and 5b specifying changes in attitudes by exposure and by treatment type for basic group orientation were not supported by the data, and there was little evidence to suggest the existence of a relationship for either of the hypotheses.

When variables of age, residence, sex, marital status, education, occupation, and income are introduced as controls, there is little evidence to suggest a relationship or to specify the relationship further.

In summary, when examining the relationship between exposure to the content materials of the program and attitudinal change concerning basic problem issues, there is little evidence to support the existence of a relationship or to specify the direction of a relationship. There is some evidence to suggest a relationship between the type of treatment involved and attitudinal change relating to basic problem issues, but such evidence exists for only two of the five attitudinal orientations, and the strength of the relationship in all instances leaves an area of speculation as to the precise effects of treatment type on attitudinal change. When control variables are introduced, the relationship is clarified only slightly and significant changes that would suggest a relationship are not evidenced. At best, the control variables are only slightly suggestive.

From this point of reference, an examination of the areas which would tend to account for divergences seems worthwhile.

The areas of prime theoretical and methodological concern and other areas that could offer insight are:

1. The concepts and theories relating to change and to basic problem issues
2. The selection and definition of meaningful variables in the study design
3. Inadequacies in method (or specifically, in sampling)
4. Organizational field practices

In this research evaluating an adult educational program, the concept of change and its relationship to attitudinal orientations concerning problem issues is based on existing literature that is both current and relevant.

The desired outcomes of the program were centered around an increased appreciation for the problems, a change in beliefs about knowledge, and an increase in information-seeking activities related to the problems. In assessing these desired products, it was anticipated that they would be realized to differing degrees by participants in differing learning situations and exposed to different combinations of the content material. Along with measurement of the achievement of the program objectives, it was important to assess interaction as related to the objectives, and to gain knowledge of the joint effects of interaction combined with the informational resources of the program. While the objectives of the program as they relate to the study are realistic, they involve some theoretical areas that are at best ill-defined and are conceptually vague. Whereas the technique and measurement of attitudes and the assessment of change are methodologically precise and well-standardized, the conceptualization of what is being measured and how to best measure it is much more difficult. Specifically, the measure of attitudes related to the acceptance, cognizance, and channelization of information concerning problems that were designed, pre-tested, and utilized in the study represents only one of many differing means of measurement and only one of many theoretical conceptualizations of attitudes related to this particular dimension. Direct-content types of questions about content materials sometimes suffice as an adequate and applicable method of measurement. Attitudinal measures that are conceptually formulated and standardized have proven value and can often have utility for differing but conceptually-related formulations. This utility is prescribed by conceptual inference and by the assumption of indirect pertinence as it relates to the conceptualization of problems. Combinations of content questions and standardized measures are also of utility in assessing attitudinal orientations that are conceptually related to the specific objectives of programs, and, in this program, in assessing increased appreciation for specific types of problems, changes in beliefs about knowledge, and channelization of information-seeking activities.

The content materials of the program are often vague: questions are posed but answers are not supplied. The materials are artfully presented and sometimes are vaguely contradictory. It is likely, and even probable, that some other approaches or some combination of approaches to the measurement of attitudes would have been equally as fruitful if not more so than those utilized.

With reference to the second area of concern, it is obvious that the variables of attitudinal change as they were related to the objectives of the program (or desired outcomes as stated in the objectives) appeared relevant from the literature. It is obvious, too, that other variables could have been included, but in many ways might have had a tendency to complicate and confuse, rather than to implement the study. This does not mean that other variables would not be useful, more salient, or more pertinent; it only means that since the existing literature is sparse in this area and similar studies are rare, the variables used seemed most logical and pertinent, in view of the existing theory and the state of knowledge in this particular subject area.

The third area of concern (the sample and related methodological procedures) appears to be a matter of a more serious nature. It was anticipated that the typical participant would be "at least a high school graduate, in the medium to upper income brackets, between 30 to 50 years of age, and probably have had some previous experience in an adult liberal studies program."

In the recruitment of participants for the sample in local communities, many factors that conditioned the sample came into operation. It is likely that the total effect of these was to introduce many types of bias into the sample, and for the sample to be composed of something quite different in terms of social characteristics from what was originally prescribed.

The first of the conditioning factors is that the program itself, and specifically some treatment types, may have been selective of the most dogmatic types who were least amenable to change. The data in Part III indicate that some treatment types experienced greater rates of attrition than did some others. The implication is that the combination of media in some types may have had greater appeal to those individuals least amenable to change. In Part V, which deals with the control variables, there is evidence of a rural and low income change pattern. There is an indication that individuals with rural residence and low income characteristics experienced proportionately greater change with exposure to the content materials of the program, but that these types of individuals appear to be under-represented in the sample.

Another factor involves the general assumption that local leaders, in differing institutional areas, structured into advisory committees, will be knowledgeable about and capable of promoting programs and enticing participants in all areas of endeavor.

A third factor is that participants in some areas were allocated randomly to treatment types, and for this reason some potential participants in enrolling were not interested and some who did enroll dropped out of the program. Another related fact is that participants were asked to bear the expense of the content materials involved, and in some treatment types many potential participants could not afford or did not find the expenditure expedient at the time.

Another factor that could have introduced a measure of bias into the sample is that some of the treatment types involved many different kinds of participation, e.g., educational, social, participational, vocational. Many individuals could have had very specific reasons for participating that were totally unrelated to the intended objectives of the program.

Many groups forming the treatment types were heavily weighted with individuals who also formed the membership of special interest groups. This could have had an influence on the type of participant recruited for the program. Some groups were class structured, and many groups seemed to be structured around social and psychologically-oriented interests.

Assuming that some groups were so constituted, it is probable that the group itself had a tendency to reinforce existing attitudes rather than to change them. Also, special interest or class structured groups often tend to exclude individuals with differing interests or those outside the group.

Finally, it is likely that certain of the treatment types that did not materialize or some that disintegrated after formation could have offered a degree of clarification and added explanation to the analysis. It is possible that these treatment types could have been more significant in specifying a relationship than some of the existing treatment types.

Another possibility is that attitude change, or the implied threat of change, may have caused dropouts in the program. In such a case, the effect would be that those participants who were left in the program were the individuals who did not change. At this point, this is merely a matter of conjecture, but for future reference it appears to be a matter for consideration.

The fourth area of concern is of import both for this study and for future studies of a similar nature. This concern is with organizations and agencies that promote programs implying change or shifts in attitudes. Organizations of this sort are composed of individuals whose function is to interact with other individuals in imparting ideas and tools by which change is implemented. Levels of understanding, training, professionalization, and competence are entwined with the prime objectives of a program that is carried out by such organizations. Since these forces often spell the ultimate success or failure of a particular program and its purposes, it is imperative that all individuals at all levels of the organization possess the proper skills and training prescribed by the objectives of the program. It is incongruous that large sums are expended in the development of content materials and other tools for learning and relatively minute attention is devoted to the development of human skills in manipulating these tools. For example, there was some evidence of a need for more control in the training and selection of discussion leaders for the discussion groups for this program. Concurrently, there was also a definite need for the development of the same skills by individuals who compose the staff of organizations and usually operate at all stages of the program.

The implications of this study as related to the preceding analysis are many and varied, but tend to center around basic theoretical considerations and methodological procedures. Assumptions concerning the types of variables and techniques of measurement involved have an important bearing on the performance and utility of programs of this general nature.

The existence of a relationship between treatment type and rates of attrition (Part III, Sample Characteristics) and the hypothetical assumption that the sample was selective for those less amenable to change involves a prime implication for future endeavors in evaluating content programs for adult audiences. Many existing evaluative studies give evidence of some of the same pitfalls that characterize this study, but the most obvious difficulty concerned problems with sampling procedures.[23] The major problem in sampling appeared to be the matter of selectivity. This was due to factors in recruitment of the sample, the nature of personality characteristics of the participants, and to the attrition performance of participants. Many of the difficulties with sampling could be avoided, but many of the controls needed are difficult, if not impossible, to apply in large-scale field operations.

The implication for future evaluation is that there is much to be gained by the structuring of small experimental groups that operate in much the same manner as laboratories. By this method, controls can be applied and a greater number of varying types of treatment combinations can be assessed. After the function of the experimental groups has been assessed, then, if desired, larger field operations can more authoritatively be carried out.

Conclusions of the present study also have much import for specifications in sampling and related methodological techniques. Many of the pitfalls involved in recruiting participants and maintaining consistency in the structure of the sample can be avoided with an application of the knowledge gained in this study.

The selection and training of personnel who work at all levels in implementing programs of this nature is an area of prime concern. The general import of trained individuals to a program cannot be overestimated.

Another conclusion is that much could probably be gained from a well-formulated analysis of those individuals who started but did not complete the program. Since this particular study is longitudinal in nature, there were many individuals who started the program and for one reason or another did not complete it. An assessment of the characteristics of these individuals and their reasons for dropping the program and a comparison with those who did complete the program could be of utility for future studies.

The rapid growth of adult education and educational facilities indicates that vast numbers of people are motivated to participate in such programs. The motivation of individuals to participate in adult education is an area of study in itself. One contribution to thought concerning this fact and one evidence of the value of this adult liberal studies program is that so many individuals spent time, money, and effort participating in the program and did complete it. It can generally be assumed that if the program had not been of some utility, no one would have finished it.

A final and general conclusion from these data is that there is some difficulty with respect to the current theory of change relating to basic attitudinal orientation. It is altogether probable that one area of difficulty is the notion that attitudinal change is quickly and easily induced.

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[23] Harry L. Miller and Christine H. McGuire, _Evaluating Liberal Adult Education_, Chicago, Center for the Study of Liberal Education for Adults, 1961; Brunner _et al._, _op. cit._, Chapter 14 especially.

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APPENDIX A

/ Pre-test Instructions _7

CENTER FOR CONTINUING EDUCATION
UNIVERSITY OF GEORGIA
ATHENS, GEORGIA

INSTRUCTIONS

The information we request from you is confidential and you will remain anonymous. (Your name is needed to compare the answers you give today with your experience at the beginning of this program. After each person's reports have been combined, all names will be destroyed and for identification purposes numbers will be substituted.)

We have tried to simplify this form wherever possible. In most cases a check mark is a sufficient response on your part. (Of course, please feel free to make comments at the end of the form. We would appreciate your thoughts.)

Please answer each question and when you have finished, please check your form for completeness.

All participants will be personally notified of the results of these studies when they are completed. Thank you for your cooperation.

H. Max Miller, Assistant Professor
and Research Director

T. W. Mahler, Associate Director
Georgia Center for Continuing Education

YOUR NAME______________________________

YOUR HOME ADDRESS______________________

CITY AND STATE__________________________

DATE__________________

/¯Post-test Instructions _7

THE GEORGIA CENTER
for Continuing Education
THE UNIVERSITY OF GEORGIA
Athens, Georgia

Your participation in the Basic Issues of Man program is appreciated. You will recall completing a questionnaire at the beginning of the program. This was the first stage of the research activity.

The second and final (from the participant's standpoint) stage of the research plan calls for completing the enclosed questionnaire. It is in two parts. The first section is largely a duplicate of the instrument you filled out at the beginning of the program. Please respond to it as accurately as possible without making a special effort either to recall and repeat responses made the first time you filled out the questionnaire, or to make your responses conform to results you think the researchers may wish to find. The second section of this questionnaire is presented to you for the first time. It attempts to determine your general reactions to the over-all program and to selected aspects of the program.

The quality of the evaluation and the early completion of the research will both be helped if you can give this your prompt attention.

Sincerely yours,

H. Max Miller, Assistant Professor
and Research Director

T. W. Mahler, Associate Director
Georgia Center for Continuing Education

THE INSTRUMENT

---

1. First, we would like to get some information about your previous educational experience. Have you ever participated in any liberal studies program before now?

____Yes (Please go on to 1A) ____No (Please go on to 2)

1A. Please give the name(s) of the program(s) or describe them. (use back of sheet if necessary).

____

____

____

____

---

2. Are you: ____Male ____Female

---

3. What is your age? (Please check one)

____Under 25 ____25-34 ____35-44 ____45-54

____55-64 ____65 or older

---

4. Are you: ____Single ____Married ____Separated ____Divorced

____Widowed

---

5. How many children do you have? ____________.

Do you have children currently attending any school?

____Yes ____No

---

6. Please indicate, by a check, the highest grade or level of schooling you have completed.

____Completed grade school

____Attended high school, did not graduate

____Graduated high school

____Attended college, did not graduate

____College graduate

____Post-graduate college training

____Other (specify:) ______________

---

7. If you are married, indicate by a check, the highest grade or level of schooling your spouse has completed.

____Completed grade school

____Attended high school, did not graduate

____Graduated high school

____Attended college, did not graduate

____College graduate

____Post-graduate college training

____Other (specify:)____________

____Not Married

8. How long have you lived in your present town or community of residence?

____Years.

9. Would you consider your present residence to be; a.____rural farm

b.____rural nonfarm c.____urban

10. What is your present occupation? Describe fully the kind of work you do.

____

____

____

11. If you are married what is your spouse's occupation? Describe fully.
____not married

____

____

____

12. Please check the interval below which includes your usual total family income.

____Less than $5,000 a year

____$5,000 to $9,999 a year

____$10,000 a year or more

13. Here are three of the types of educational programs which many people have requested.

TYPE A: This consists of bringing together, in a manageable way, the fundamentals of the various fields of knowledge -- the arts, the sciences, and the humanities. In other words, this type of education is mainly a related collection of facts and general ideas.

TYPE B: This consists of learning why and how to examine conventional ideas. It involves logic, the scientific method, and much self-examination. In other words, this type of education provides the skills of asking, "Is it true?", about many things in life.

TYPE C: This consists of an appreciation and understanding of our traditions, especially as they are revealed in the writings of the greatest minds in our history. In other words, this type of education is an education in literature and philosophy.

These three types of education are listed below, across the page. A number of statements which may refer to none, one, two, or all three types are listed down the page. For each statement, check which of the types of education are best described by that statement, in your opinion. (Please refer back to the description above as often as you feel is necessary.)

		TYPE A	TYPE B	TYPE C
A.	I WOULD LIKE TO HAVE THIS TYPE OF EDUCATION.	( )	( )	( )
B.	THIS TYPE OF EDUCATION ENRICHES LIFE.	( )	( )	( )
C.	THIS TYPE OF EDUCATION WILL AID IN BECOMING A MORE MORAL PERSON.	( )	( )	( )
D.	THIS TYPE OF EDUCATION WILL PROVIDE ME WITH A GREAT DEAL OF VALUABLE INFORMATION.	( )	( )	( )
E.	THIS TYPE OF EDUCATION WILL AID IN REDUCING DOUBTS ABOUT LIFE.	( )	( )	( )
F.	THIS TYPE OF EDUCATION WILL CONTRIBUTE VERY MUCH TO THE INDIVIDUAL'S PERSONAL DEVELOPMENT.	( )	( )	( )
G.	THIS TYPE OF EDUCATION WILL AID ME TO BECOME A MORE INSIGHTFUL PERSON WITH BROADER PERSPECTIVES.	( )	( )	( )
H.	THIS IS A TYPE OF EDUCATION I KNOW I WOULD ENJOY.	( )	( )	( )
I.	THIS TYPE OF EDUCATION WILL PERMIT ME TO BECOME A MORE EFFECTIVE PERSON IN LIVING.	( )	( )	( )
J.	THIS TYPE OF EDUCATION WILL PROVIDE A SOUND BASIS FOR MY BASIC BELIEFS.	( )	( )	( )
K.	I EXPECT THAT THE GEORGIA ADULT LIBERAL STUDIES PROGRAM WILL BE THIS TYPE OF EDUCATION.	( )	( )	( )

14. Here is a list of some things we have heard people say. If you heard these statements, would you be likely to agree or disagree a little, pretty much, or very much? (Make only one check for each statement.)

A. HUMAN NATURE BEING WHAT IT IS, THERE WILL ALWAYS BE WAR AND CONFLICT.

Agree: Little____ Pretty Much____ Very Much____

Disagree: Little____ Pretty Much____ Very Much____

B. THE MOST IMPORTANT THING A CHILD SHOULD LEARN IS OBEDIENCE TO HIS PARENTS.

Agree: Little____ Pretty Much____ Very Much____

Disagree: Little____ Pretty Much____ Very Much____

C. A FEW STRONG LEADERS COULD MAKE THIS COUNTRY BETTER THAN ALL THE LAWS AND TALK.

Agree: Little____ Pretty Much____ Very Much____

Disagree: Little____ Pretty Much____ Very Much____

D. MOST PEOPLE WHO DON'T GET AHEAD JUST DON'T HAVE ENOUGH WILL-POWER.

Agree: Little____ Pretty Much____ Very Much____

Disagree: Little____ Pretty Much____ Very Much____

E. WOMEN SHOULD STAY OUT OF POLITICS.

Agree: Little____ Pretty Much____ Very Much____

Disagree: Little____ Pretty Much____ Very Much____

F. PEOPLE SOMETIMES SAY THAT AN INSULT TO YOUR HONOR SHOULD NOT BE FORGOTTEN. DO YOU AGREE OR DISAGREE WITH THAT?

Agree: Little____ Pretty Much____ Very Much____

Disagree: Little____ Pretty Much____ Very Much____

G. PEOPLE CAN BE TRUSTED.

Agree: Little____ Pretty Much____ Very Much____

Disagree: Little____ Pretty Much____ Very Much____

---

15. Now, let's go on to another matter. Please go through the statements below, one at a time, and check, for each, whether you agree or disagree a little, pretty much, or very much.

A. I DON'T THINK ANYONE'S BASIC BELIEFS SHOULD BE A BASIS FOR JUDGING THAT PERSON.

Agree: Little____ Pretty Much____ Very Much____

Disagree: Little____ Pretty Much____ Very Much____

B. BASIC BELIEFS ARE ALMOST NEVER A SUITABLE TOPIC FOR DISCUSSION WITH ANYONE.

Agree: Little____ Pretty Much____ Very Much____

Disagree: Little____ Pretty Much____ Very Much____

C. PEOPLE SHOULD NOT SELECT THEIR CLOSE FRIENDS ONLY FROM AMONG THOSE WHO HAVE THE SAME BASIC BELIEFS.

Agree: Little____ Pretty Much____ Very Much____

Disagree: Little____ Pretty Much____ Very Much____

---

16. Now, imagine that a number of people like yourself are together to talk about your basic beliefs. Give your best prediction of how you would probably act in this situation by going through the statements below and checking the best answer.

	YES, I PROBABLY WOULD	I DON'T KNOW WHAT I'D DO	NO, I PROBABLY WOULDN'T
A. I WOULD SOMETIMES TRY TO MAKE TACTFUL COMMENTS TO HEAL ANY HURT FEELINGS WHICH MIGHT ARISE IN THE DISCUSSION.	( )	( )	( )
B. I WOULD SOMETIMES TRY TO PULL THE THREADS OF THE DISCUSSION TOGETHER AND TRY TO COMPARE THE DIFFERENT VIEWPOINTS PRESENTED.	( )	( )	( )
C. I WOULD SOMETIMES JOKE OR KID, TRYING TO FIND THE POTENTIALLY HUMOROUS IMPLICATIONS IN THE DISCUSSION.	( )	( )	( )
D. I WOULD SOMETIMES TRY TO CLARIFY THE DISCUSSION BY GETTING IT TO THE POINT, GETTING TERMS DEFINED, AND POINTING OUT LOGICAL PROBLEMS.	( )	( )	( )
E. I WOULD SOMETIMES PROVIDE "FUEL" FOR DISCUSSION BY INTRODUCING IDEAS AND OPINIONS FOR THE OTHERS TO DISCUSS.	( )	( )	( )

17. Now, we'd like to find out how people may feel or think about their basic beliefs. A list of statements about how people feel is below (and on the next page.) Please indicate for each statement whether you strongly agree or strongly disagree or how you feel. If you strongly agree, circle the number (1) at the far left end of the scale; if you strongly disagree, circle the number (9) at the far right end of the scale. You may, of course, if your agreement or disagreement is not that strong, circle any of the intermediate numbers.

	STRONGLY AGREE				UNCERTAIN			STRONGLY DISAGREE	
A. I FEEL VERY MUCH PRIDE IN MY BASIC BELIEFS.	1	2	3	4	5	6	7	8	9
B. I AM SOMETIMES UNSUCCESSFUL WHEN I TRY TO PUT MY BASIC BELIEFS INTO WORDS.	1	2	3	4	5	6	7	8	9
C. I THINK THAT THE PERSON WHO DOESN'T KNOW EXACTLY WHAT HE BELIEVES PROBABLY DOESN'T HAVE BASIC BELIEF.	1	2	3	4	5	6	7	8	9
D. I HAVE DOUBTS ABOUT THE RIGHTNESS OF MY BASIC BELIEFS WHEN I THINK ABOUT THEM.	1	2	3	4	5	6	7	8	9
E. I FIND THAT ONE PART OF ME SAYS MY BASIC BELIEFS ARE RIGHT AND ANOTHER PART OF ME SAYS THEY'RE WRONG.	1	2	3	4	5	6	7	8	9
F. IT ISN'T GOOD TO THINK ABOUT YOUR BASIC BELIEFS TOO MUCH.	1	2	3	4	5	6	7	8	9
G. I'M NOT ALWAYS SURE I KNOW WHAT I REALLY DO BELIEVE.	1	2	3	4	5	6	7	8	9
H. I'M NOT ALWAYS CERTAIN THAT I HAVE BASIC BELIEFS.	1	2	3	4	5	6	7	8	9
I. PERSONALLY, I THINK IT'S BETTER TO BE CERTAIN ABOUT THE RIGHTNESS OF MY BASIC BELIEFS THAN TO HAVE DOUBTS ABOUT THEM.	1	2	3	4	5	6	7	8	9
J. I KNOW EXACTLY WHAT I BELIEVE.	1	2	3	4	5	6	7	8	9
K. I AM SOMETIMES UNSUCCESSFUL IN TRYING TO EXPLAIN MY BASIC BELIEFS TO OTHER PEOPLE.	1	2	3	4	5	6	7	8	9
L. I HAVE SOME BASIC BELIEFS I'D PREFER NOT TO HAVE.	1	2	3	4	5	6	7	8	9
M. I SOMETIMES FIND THAT I WORRY ABOUT MY BASIC BELIEFS.	1	2	3	4	5	6	7	8	9
N. IT ISN'T GOOD TO DOUBT THE RIGHTNESS OF YOUR BASIC BELIEFS.	1	2	3	4	5	6	7	8	9
O. PERSONALLY, I DON'T CONSIDER IT BAD OR UNDESIRABLE IF A PERSON ISN'T EXACTLY SURE OF WHAT HIS BASIC BELIEFS ARE.	1	2	3	4	5	6	7	8	9

	STRONGLY AGREE				UNCERTAIN				STRONGLY DISAGREE
P. I HAVE NO DOUBTS ABOUT THE RIGHTNESS OF MY BASIC BELIEFS WHEN I THINK ABOUT THEM.	1	2	3	4	5	6	7	8	9
Q. REALLY, THERE ISN'T MUCH LOGIC TO MY BASIC BELIEFS: I JUST HAVE THEM.	[illegible]	2	3	4	5	6	7	8	9
R. I HAVE DIFFICULTY PUTTING MY BASIC BELIEFS INTO WORDS.	1	2	3	4	5	6	7	8	9
S. I THINK THAT PEOPLE WHO CAN'T EXPLAIN THEIR BASIC BELIEFS USUALLY DON'T KNOW WHAT THEY BELIEVE.	1	2	3	4	5	6	7	8	9
T. PERSONALLY, I DON'T CONSIDER IT BAD OR UNDESIRABLE IF A PERSON HAS DIFFICULTY PUTTING HIS BELIEFS INTO WORDS.	1	2	3	4	5	6	7	8	9
U. I AM SOMETIMES ASHAMED OF MY BASIC BELIEFS.	1	2	3	4	5	6	7	8	9
V. I DON'T ALWAYS FIND IT EASY TO MAINTAIN OR HOLD ONTO MY BELIEFS.	1	2	3	4	5	6	7	8	9

18. Let's assume that you did have a doubt about one of your basic beliefs, and that you wanted to get some clarification.

What would you do to get some clarification?____________________________

19. In general, what are the chances that you would get clarification if you did do what you wrote in Question (circle one)

VERY GOOD GOOD FAIR POOR VERY POOR

20. How satisfied would you be with the outcome you described in Question

VERY SATISFIED SATISFIED PARTLY SATISFIED NOT SATISFIED

21. How much difference, personally, would it make to you whether you did get clarification? (Is this something that means a great deal to you or little to you or what?)

A GREAT DEAL OF DIFFERENCE SOME DIFFERENCE LITTLE OR NO DIFFERENCE

APPENDIX B

TABLE 1 **AGE OF RESPONDENT AND EDUCATIONAL PREFERENCE**

	Educational Preference								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Age	No.	%	No.	%	No.	%	No.	%	
Under 25	2	22.2	3	33.3	7	77.8	6	66.7	9
25 - 34	34	50.0	34	50.0	34	50.0	34	50.0	68
35 - 44	34	43.6	42	53.8	44	56.4	36	46.2	78
45 - 54	52	55.3	48	51.1	42	44.7	46	48.9	94
55 - 64	20	54.1	17	45.9	17	45.9	20	54.1	37
65 & older	8	53.3	7	46.7	7	46.7	8	53.3	15

TABLE 2 **RESIDENCE OF RESPONDENT AND EDUCATIONAL PREFERENCE**

	Educational Preference								
	High				Low				N
Residence	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Type	No.	%	No.	%	No.	%	No.	%	
Rural Farm	6	26.1	11	47.8	17	73.9	12	52.2	23
Rural Non-Farm	26	55.3	25	53.2	21	44.7	22	46.8	47
Urban	116	50.7	114	49.8	113	49.3	115	50.2	229
No Response	1	100.0	0	0	0	0	1	100.0	1

TABLE 3 SEX OF RESPONDENT AND EDUCATIONAL PREFERENCE

	Educational Preference								N	
	High				Low				(Pre = Post)	
	Pre-test		Post-test		Pre-test		Post-test			
Sex	No.	%	No.	%	No.	%	No.	%	No.	%
Male	54	50.0	49	45.4	54	50.0	59	54.6	108	100.0
Female	96	49.7	102	52.8	97	50.3	91	47.2	193	100.0

TABLE 4 MARITAL STATUS OF RESPONDENT AND EDUCATIONAL PREFERENCE

	Educational Preference								N
	High				Low				(Pre = Post)
	Pre-test		Post-test		Pre-test		Post-test		
Marital Status	No.	%	No.	%	No.	%	No.	%	
Single	20	48.8	21	51.2	21	51.2	20	48.8	41
Married	112	50.5	114	51.4	110	49.5	108	48.6	222
Separated	1	33.3	1	33.3	2	66.7	2	66.7	3
Divorced	6	50.0	6	50.0	6	50.0	6	50.0	12
Widowed	11	47.8	9	39.1	12	52.2	14	60.9	23

TABLE 5 EDUCATION OF RESPONDENT AND EDUCATIONAL PREFERENCE

	Educational Preference								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Education	No.	%	No.	%	No.	%	No.	%	
Completed Grade School	0	0	0	0	0	0	0	0	0
Attended High School	4	50.0	4	50.0	4	50.0	20	50.0	8
Graduated High School	13	39.4	18	54.5	20	60.6	15	45.5	33
Attended College, b.d.n.g.	23	45.1	21	41.2	28	54.9	30	58.8	51
College Graduate	30	51.7	30	51.7	28	48.3	28	48.3	58
Post-Graduate College Training	74	52.9	72	51.4	66	47.1	68	48.6	140
Other	5	50.0	5	50.0	5	50.0	5	50.0	10
No Response	1	100.0	1	100.0	0	0	0	0	1

TABLE 6 OCCUPATION OF RESPONDENT AND EDUCATIONAL PREFERENCE

	Educational Preference								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Occupation	No.	%	No.	%	No.	%	No.	%	
Professional	14	46.7	15	50.0	16	53.3	15	50.0	30
Semi-Professional	64	51.2	57	45.6	61	48.8	68	54.4	125
Business or Executive	13	46.4	13	46.4	15	53.6	15	53.6	28
Other White Collar	7	30.4	9	39.1	16	69.6	14	60.9	23
Agriculture	1	25.0	3	75.0	3	75.0	1	25.0	4
Skilled Blue Collar	3	60.0	4	80.0	2	40.0	1	20.0	5
All Other Blue Collar & Service	0	0	0	0	0	0	0	0	0
Housewife	41	53.2	43	55.8	36	46.8	34	44.2	77
Retired	6	75.0	6	75.0	2	25.0	2	25.0	8
No Response	1	100.0	1	100.0	0	0	0	0	1

TABLE 7 INCOME OF RESPONDENT AND EDUCATIONAL PREFERENCE

Educational Preference

	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Income	No.	%	No.	%	No.	%	No.	%	
Less than $5,000 per year	14	50.0	15	53.6	14	50.0	13	46.4	28
$5,000-$9,999	68	48.9	66	47.5	71	51.1	73	52.5	139
$10,000 or more	66	50.8	68	52.3	64	49.2	62	47.7	130
No Response	1	33.3	1	33.3	2	66.7	2	66.7	3

TABLE 8 AGE OF RESPONDENT AND AUTHORITARIANISM-DOGMATISM

Authoritarianism-Dogmatism

	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Age	No.	%	No.	%	No.	%	No.	%	
Under 25	2	22.2	4	44.4	7	77.8	5	55.6	9
25 - 34	33	48.5	26	38.2	35	51.5	42	61.8	68
35 - 44	47	60.3	42	53.8	31	39.7	36	46.2	78
45 - 54	44	46.8	54	57.4	50	53.2	40	42.6	94
55 - 64	22	59.5	19	51.4	15	40.5	18	48.6	37
65 & older	4	26.7	6	40.0	11	73.3	9	60.0	15

TABLE 9 RESIDENCE OF RESPONDENT AND AUTHORITARIANISM-DOGMATISM

Authoritarianism-Dogmatism

Residence Type	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
	No.	%	No.	%	No.	%	No.	%	
Rural Farm	7	30.4	10	43.5	16	69.6	13	56.5	23
Rural Non-Farm	21	44.7	21	44.7	26	55.3	26	55.3	47
Urban	123	53.7	119	52.0	106	46.3	110	48.0	229
No Response	1	100.0	1	100.0	0	0	0	0	1

TABLE 10 SEX OF RESPONDENT AND AUTHORITARIANISM-DOGMATISM

Authoritarianism-Dogmatism

Sex	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
	No.	%	No.	%	No.	%	No.	%	
Male	56	51.9	53	49.1	52	48.1	55	50.9	108
Female	96	49.7	98	50.8	97	50.3	95	49.2	193

TABLE 11 MARITAL STATUS OF RESPONDENT AND AUTHORITARIANISM-DOGMATISM

	Authoritarianism-Dogmatism								
	High				Low				N
Marital Status	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
	No.	%	No.	%	No.	%	No.	%	
Single	20	48.8	25	61.0	21	51.2	16	39.0	41
Married	115	51.8	111	50.0	107	48.2	111	50.0	222
Separated	2	66.7	2	66.7	1	33.3	1	33.3	3
Divorced	6	50.0	5	41.7	6	50.0	7	58.3	12
Widowed	9	39.1	8	34.8	14	60.9	13	56.5	23

TABLE 12 EDUCATION OF RESPONDENT AND AUTHORITARIANISM-DOGMATISM

Authoritarianism-Dogmatism

Education	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
	No.	%	No.	%	No.	%	No.	%	
Completed Grade School	0	0	0	0	0	0	0	0	0
Attended High School	4	50.0	2	25.0	4	50.0	6	75.0	8
Graduated High School	10	30.3	15	45.5	23	69.7	18	54.5	33
Attended College,b.d.n.g.	17	33.3	20	39.2	34	66.7	31	60.8	51
College Graduate	31	53.4	28	48.3	27	46.6	30	51.7	58
Post-Graduate College Training	86	61.4	83	59.3	53	37.9	57	40.7	140
Other	3	30.0	3	30.0	7	70.0	7	70.0	10
No Response	0	0	0	0	1	100.0	1	100.0	1

TABLE 13 OCCUPATION OF RESPONDENT AND AUTHORITARIANISM-DOGMATISM

	Authoritarianism-Dogmatism								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Occupation	No.	%	No.	%	No.	%	No.	%	
Professional	22	73.3	20	66.7	8	26.7	10	33.3	30
Semi-professional	70	56.0	61	48.8	55	44.0	64	51.2	125
Business or Executive	11	39.3	13	46.4	17	60.7	15	53.6	28
Other White Collar	7	30.4	9	39.1	16	69.6	14	60.9	23
Agriculture	3	75.0	3	75.0	1	25.0	1	25.0	4
Skilled Blue Collar	2	40.0	2	40.0	3	60.0	3	60.0	5
All Other Blue Collar & Service	0	0	0	0	0	0	0	0	0
Housewife	34	44.2	38	49.4	43	55.8	39	50.6	77
Retired	3	37.5	5	62.5	5	62.5	3	37.5	8
No Response	0	0	0	0	1	100.0	1	100.0	1

TABLE 14 INCOME OF RESPONDENT AND AUTHORITARIANISM-DOGMATISM

	Authoritarianism-Dogmatism								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Income	No.	%	No.	%	No.	%	No.	%	
Less than $5,000 per year	8	28.6	12	42.9	20	71.4	16	57.1	28
$5,000-$9,999	65	46.8	68	48.9	74	53.2	71	51.1	139
$10,000 or more	78	60.0	71	54.6	52	40.0	59	45.4	130
No Response	0	0	0	0	3	100.0	3	100.0	3

TABLE 15 AGE OF RESPONDENT AND FUNDAMENTALISM-LIBERALISM

	Fundamentalism-Liberalism								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Age	No.	%	No.	%	No.	%	No.	%	
Under 25	3	33.3	2	22.2	6	66.7	7	77.8	9
25 - 34	30	44.1	34	50.0	38	55.9	34	50.0	68
35 - 44	34	43.6	36	46.2	44	56.4	42	53.8	78
45 - 54	44	46.8	46	48.9	50	53.2	48	51.1	94
55 - 64	27	73.0	26	70.3	10	27.0	11	29.7	37
65 & older	10	66.7	7	46.7	5	33.3	8	53.3	15

TABLE 16 RESIDENCE OF RESPONDENT AND FUNDAMENTALISM-LIBERALISM

	Fundamentalism-Liberalism								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Residence Type	No.	%	No.	%	No.	%	No.	%	
Rural Farm	14	60.9	13	56.5	9	39.1	10	43.5	23
Rural Non-Farm	25	53.2	24	51.1	22	46.8	23	48.9	47
Urban	107	46.7	112	48.9	122	53.3	117	51.1	229
No Response	1	100.0	1	100.0	0	0	0	0	1

TABLE 17 SEX OF RESPONDENT AND FUNDAMENTALISM-LIBERALISM

	Fundamentalism-Liberalism								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Sex	No.	%	No.	%	No.	%	No.	%	
Male	45	41.7	42	38.9	63	58.3	66	61.1	108
Female	103	53.4	109	56.5	90	46.6	84	43.5	193

TABLE 18 MARITAL STATUS OF RESPONDENT AND FUNDAMENTALISM-LIBERALISM

Marital Status	Fundamentalism-Liberalism								N
	High				Low				(Pre = Post)
	Pre-test		Post-test		Pre-test		Post-test		
	No.	%	No.	%	No.	%	No.	%	
Single	20	48.8	19	46.3	21	51.2	22	53.7	41
Married	104	46.8	109	49.1	118	53.2	113	50.9	222
Separated	2	66.7	2	66.7	1	33.3	1	33.3	3
Divorced	8	66.7	9	75.0	4	33.3	3	25.0	12
Widowed	14	60.9	12	52.2	9	39.1	11	47.8	23

TABLE 19 EDUCATION OF RESPONDENT AND FUNDAMENTALISM-LIBERALISM

	Fundamentalism-Liberalism								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Education	No.	%	No.	%	No.	%	No.	%	
Completed Grade School	0	0	0	0	0	0	0	0	0
Attended High School, b.d.n.g.	5	62.5	4	50.0	3	37.5	4	50.0	8
Graduated High School	21	63.6	22	66.7	12	36.4	11	33.3	33
Attended College, b.d.n.g.	21	41.2	28	54.9	30	58.8	23	45.1	51
College Graduate	28	48.3	28	48.3	30	51.7	30	51.7	58
Post-Graduate College Training	65	46.4	65	46.4	75	53.6	75	53.6	140
Other	7	70.0	7	70.0	3	30.0	3	30.0	10
No Response	1	100.0	1	100.0	0	0	0	0	1

TABLE 20 OCCUPATION OF RESPONDENT AND FUNDAMENTALISM-LIBERALISM

	Fundamentalism-Liberalism								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Occupation	No.	%	No.	%	No.	%	No.	%	
Professional	10	33.3	10	33.3	20	66.7	20	66.7	30
Semi-professional	65	52.0	67	53.6	60	48.0	58	46.4	125
Business or Executive	10	35.7	10	35.7	18	64.3	18	64.3	28
Other White Collar	18	78.3	18	78.3	5	21.7	5	21.7	23
Agriculture	2	50.0	2	50.0	2	50.0	2	50.0	4
Skilled Blue Collar	5	100.0	4	80.0	0	0	1	20.0	5
All Other Blue Collar & Service	0	0	0	0	0	0	0	0	0
Housewife	33	42.9	35	45.5	44	57.1	42	54.5	77
Retired	4	50.0	4	50.0	4	50.0	4	50.0	8
No Response	1	100.0	1	100.0	0	0	0	0	1

TABLE 21 INCOME OF RESPONDENT AND FUNDAMENTALISM-LIBERALISM

Fundamentalism-Liberalism

	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Income	No.	%	No.	%	No.	%	No.	%	
Less than $5,000 per year	19	67.9	16	57.1	9	32.1	12	42.9	28
$5,000-$9,999	72	51.8	74	53.2	67	48.2	65	46.8	139
$10,000 or more	54	41.5	58	44.6	76	58.5	72	55.4	130
No Response	3	100.0	2	66.7	0	0	1	33.3	3

TABLE 22 AGE OF RESPONDENT AND CULTURAL RELATIVITY

Cultural Relativity

	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Age	No.	%	No.	%	No.	%	No.	%	
Under 25	4	44.4	4	44.4	5	55.6	5	55.6	9
25 - 34	35	51.5	35	51.5	33	48.5	33	48.5	68
35 - 44	44	56.4	39	50.0	34	43.6	39	50.0	78
45 - 54	48	51.1	45	47.9	46	48.9	49	52.1	94
55 - 64	23	62.2	22	59.5	14	37.8	15	40.5	37
65 & older	6	40.0	6	40.0	9	60.0	9	60.0	15

TABLE 23 RESIDENCE OF RESPONDENT AND CULTURAL RELATIVITY

	Cultural Relativity								
	High				Low				N
Residence Type	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
	No.	%	No.	%	No.	%	No.	%	
Rural Farm	8	34.8	9	39.1	15	65.2	14	60.9	23
Rural Non-Farm	24	51.1	21	44.7	23	48.9	26	55.3	47
Urban	127	55.5	119	52.0	102	44.5	110	48.0	229
No Response	1	100.0	1	100.0	0	0	0	0	1

TABLE 24 SEX OF RESPONDENT AND CULTURAL RELATIVITY

	Cultural Relativity								
	High				Low				N
Sex	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
	No.	%	No.	%	No.	%	No.	%	
Male	58	53.7	51	47.2	50	46.3	57	52.8	108
Female	102	52.8	100	51.8	91	47.2	93	48.2	193

TABLE 25 MARITAL STATUS OF RESPONDENT AND CULTURAL RELATIVITY

Marital Status	Cultural Relativity: High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
	No.	%	No.	%	No.	%	No.	%	
Single	26	63.4	18	43.9	15	36.6	23	56.1	41
Married	111	50.0	112	50.5	111	50.0	110	49.5	222
Separated	1	33.3	1	33.3	2	66.7	2	66.7	3
Divorced	8	66.7	9	75.0	4	33.3	3	25.0	12
Widowed	14	60.9	11	47.8	9	39.1	12	52.2	23

TABLE 26 EDUCATION OF RESPONDENT AND CULTURAL RELATIVITY

	Cultural Relativity								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Education	No.	%	No.	%	No.	%	No.	%	
Completed Grade School	0	0	0	0	0	0	0	0	0
Attended High School, b.d.n.g.	3	37.5	5	62.5	5	62.5	3	37.5	8
Graduated High School	9	27.3	10	30.3	24	72.7	23	69.7	33
Attended College, b.d.n.g.	23	45.1	20	39.2	28	54.9	31	60.8	51
College Graduate	36	62.1	30	51.7	22	37.9	28	48.3	58
Post-Graduate College Training	82	58.6	79	56.4	58	41.4	61	43.6	140
Other	7	70.0	3	30.0	3	30.0	7	70.0	10
No Response	0	0	1	100.0	1	100.0	0	0	1

TABLE 27 OCCUPATION OF RESPONDENT AND CULTURAL RELATIVITY

	Cultural Relativity								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Occupation	No.	%	No.	%	No.	%	No.	%	
Professional	18	60.0	19	63.3	12	40.0	11	36.7	30
Semi-professional	69	55.2	66	52.8	56	44.8	59	47.2	125
Business or Executive	17	60.7	13	46.4	11	39.3	15	53.6	28
Other White Collar	10	43.5	10	43.5	13	56.5	13	56.5	23
Agriculture	3	75.0	2	50.0	1	25.0	2	50.0	4
Skilled Blue Collar	4	80.0	2	40.0	1	20.0	3	60.0	5
All Other Blue Collar & Service	0	0	0	0	0	0	0	0	0
Housewife	36	46.8	35	45.5	41	53.2	42	54.5	77
Retired	3	37.5	3	37.5	5	62.5	5	62.5	8
No Response	0	0	1	100.0	1	100.0	0	0	1

TABLE 28 INCOME OF RESPONDENT AND CULTURAL RELATIVITY

	Cultural Relativity								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Income	No.	%	No.	%	No.	%	No.	%	
Less than $5,000 per year	14	50.0	11	39.3	14	50.0	17	60.7	28
$5,000-$9,999	70	50.4	67	48.2	69	49.6	72	51.8	139
$10,000 or more	75	57.7	72	55.4	55	42.3	58	44.6	130
No Response	0	0	1	33.3	3	100.0	2	66.7	3

TABLE 29 AGE OF RESPONDENT AND BASIC GROUP ORIENTATION

	Basic Group Orientation								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Age	No.	%	No.	%	No.	%	No.	%	
Under 25	5	55.6	6	66.7	4	44.4	3	33.3	9
25 - 34	29	42.6	34	50.0	39	57.4	34	50.0	68
35 - 44	40	51.3	37	47.4	38	48.7	41	52.6	78
45 - 54	35	37.2	44	46.8	59	62.8	50	53.2	94
55 - 64	21	56.8	19	51.4	16	43.2	18	48.6	37
65 & older	9	60.0	11	73.3	6	40.0	4	26.7	15

TABLE 30 RESIDENCE OF RESPONDENT AND BASIC GROUP ORIENTATION

	Basic Group Orientation								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Residence Type	No.	%	No.	%	No.	%	No.	%	
Rural Farm	8	34.8	11	47.8	15	65.2	12	52.2	23
Rural Non-Farm	22	46.8	26	55.3	25	53.2	21	44.7	47
Urban	109	47.6	114	49.8	120	52.4	115	50.2	229
No Response	0	0	0	0	1	100.0	1	100.0	1

TABLE 31 SEX OF RESPONDENT AND BASIC GROUP ORIENTATION

	Basic Group Orientation								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Sex	No.	%	No.	%	No.	%	No.	%	
Male	40	37.0	48	44.4	68	63.0	60	55.6	108
Female	99	51.3	103	53.4	94	48.7	90	46.6	193

TABLE 32 MARITAL STATUS OF RESPONDENT AND BASIC GROUP ORIENTATION

	Basic Group Orientation								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Marital Status	No.	%	No.	%	No.	%	No.	%	
Single	21	51.2	22	53.7	20	48.8	19	46.3	41
Married	103	46.4	110	49.5	119	53.6	112	50.5	222
Separated	0	0	0	0	3	100.0	3	100.0	3
Divorced	3	25.0	6	50.0	9	75.0	6	50.0	12
Widowed	12	52.2	13	56.5	11	47.8	10	43.5	23

TABLE 33 EDUCATION OF RESPONDENT AND BASIC GROUP ORIENTATION

	Basic Group Orientation								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Education	No.	%	No.	%	No.	%	No.	%	
Completed Grade School	0	0	0	0	0	0	0	0	0
Attended High School	5	62.5	6	75.0	3	37.5	2	25.0	8
Graduated High School	15	45.5	18	54.5	18	54.5	15	45.5	33
Attended College,b.d.n.g.	26	51.0	22	43.1	25	49.0	29	56.9	51
College Graduate	27	46.6	33	56.9	31	53.4	25	43.1	58
Post Graduate College Training	62	44.3	69	49.3	78	55.7	71	50.7	140
Other	4	40.0	3	30.0	6	60.0	7	70.0	10
No Response	0	0	0	0	1	100.0	1	100.0	1

TABLE 34 OCCUPATION OF RESPONDENT AND BASIC GROUP ORIENTATION

	Basic Group Orientation								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Occupation	No.	%	No.	%	No.	%	No.	%	
Professional	11	36.7	12	40.0	19	63.3	18	60.0	30
Semi-Professional	61	48.8	64	51.2	64	51.2	61	48.8	125
Business or Executive	7	25.0	13	46.4	21	75.0	15	53.6	28
Other White Collar	11	47.8	12	52.2	12	52.2	11	47.8	23
Agriculture	0	0	1	25.0	4	100.0	3	75.0	4
Skilled Blue Collar	2	40.0	2	40.0	3	60.0	3	60.0	5
All Other Blue Collar & Service	0	0	0	0	0	0	0	0	0
Housewife	41	53.2	40	51.9	36	46.8	37	48.1	77
Retired	6	75.0	7	87.5	2	25.0	1	12.5	8
No Response	0	0	0	0	1	100.0	1	100.0	1

TABLE 35 INCOME OF RESPONDENT AND BASIC GROUP ORIENTATION

	Basic Group Orientation								
	High				Low				N
	Pre-test		Post-test		Pre-test		Post-test		(Pre = Post)
Income	No.	%	No.	%	No.	%	No.	%	
Less than $5,000 per year	15	53.6	23	82.1	13	46.6	5	17.9	28
$5,000 to $9,999	60	43.2	61	43.9	79	56.8	78	56.1	139
$10,000 or more	61	46.9	65	50.0	69	53.1	65	50.0	130
No Response	2	66.7	2	66.7	1	33.3	1	33.3	3

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